An Examination of Staff Perceptions of the Effectiveness of the Professional Learning Community Model: A Multiple Case Study Design

Renee Martin
St. John Fisher College, rlmartin34@schools.nyc.gov

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An Examination of Staff Perceptions of the Effectiveness of the Professional Learning Community Model: A Multiple Case Study Design

Abstract
This qualitative multiple case study sought to understand staff members’ perceptions of the components of an effective and sustainable professional learning community. The Professional Learning Community Assessment questionnaire and interviews were the instruments utilized to attain data. The study’s results allowed the researcher to identify areas of strength and areas of weakness that were integral aspects of each learning community’s operation. Specifically, the study included 22 participants across three middle school study sites. There were 12 key findings that emerged from the data across the three study locations. The findings revealed the need for regular collaboration, supportive leadership practices, a clear vision and a distinct set of values to guide learning community members. Additionally, the findings highlighted the beneficial aspects of professional learning communities but revealed the need for refinement related to adequate meeting time, supportive structures, and planning. Future research should be conducted across a longer time period with a larger sample size to ascertain if the findings are similar to those that arose from this research. Finally, a recommendation of adding an evaluative component to the learning community was made. This will enable school administrators to regularly monitor the progress of the PLC. This study will support positive change and will provide valuable data that can be utilized at each of the study sites to promote a school culture of collaboration, academic success, and collegiality. This research may potentially result in a more well-organized learning environment. The findings may serve as the impetus for sustained change and an atmosphere that influences teacher and student learning.

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An Examination of Staff Perceptions of the Effectiveness of the Professional Learning
Community Model: A Multiple Case Study Design

By

Renee Martin

Submitted in partial fulfillment
of the requirements for the degree
Ed.D. in Executive Leadership

Supervised by
Dr. W. Jeff Wallis

Committee Member
Dr. Janice Kelly

Ralph C. Wilson, Jr. School of Education
St. John Fisher College
December 2018
Dedication

“For I know the plans I have for you, declares the Lord, plans to prosper you and not to harm you, plans to give you a hope and a future.” Jeremiah 29:11

This journey would not have been possible without the guidance, strength, and grace of my Lord and Savior, Jesus Christ with whom all things are attainable.

My mother, Dr. Jacqueline Jeffrey, who has sacrificed, supported, and instilled in me the virtues of determination, hard work, a commitment to excellence, and a passion for learning. You have been my rock and my biggest cheerleader and constant source of inspiration. All my love.

To my beautiful daughter, Kayla. Your consistent patience and love allowed me to navigate the dissertation journey. My hope is that this undertaking allows you to recognize that all things are possible through the God who strengthens us. My nephew, Elijah. I am so grateful to have you in my life. My hope is that you will be inspired to conquer all of your fears and accomplish all of your dreams.

My sister, Nakita, know that the road to success has been paved, take courage, never give up and rise against all odds.

My loyal community of family, especially my dearest Aunt Dr. Francine Lyken who has been a constant source of support; friends, particularly, Yvette Brown, and colleagues who have impacted this journey, thank you.

Thank you to my dissertation chair, Dr. Wallis and my committee member, Dr. Kelly. Thank you for the guidance and direction that you provided.

My SJFC cohort members the Great 8. It was an absolute pleasure navigating this process with all of you. To my group, Doctors of Distinction: Niki, Sandy, Stephen, and Wycliffe. Thank you for your encouragement, words of wisdom, and support.
Biographical Sketch

Renee Martin is currently a lead English teacher in the Bronx, N.Y. Ms. Martin attended Manhattan College from 1997-2002 and graduated with a Bachelor of Arts degree in 2003. She majored in Broadcast Journalism and minored in Urban Studies. Ms. Martin later attended Mercy College in the Bronx from 2003-2005 and earned a Master of Science degree in Adolescent Education. She also attended Mercy College from 2008-2010 and earned a Master of Science degree in School Building Leadership in 2010. Ms. Martin commenced her doctoral studies in the Ed. D Program in Executive Leadership at St. John Fisher College in the spring of 2016. Ms. Martin conducted her research of staff perceptions of the impact of the professional learning community model under the direction of Dr. W. Jeff Wallis and Dr. Janice Kelly.
Abstract

This qualitative multiple case study sought to understand staff members’ perceptions of the components of an effective and sustainable professional learning community. The Professional Learning Community Assessment questionnaire and interviews were the instruments utilized to attain data. The study’s results allowed the researcher to identify areas of strength and areas of weakness that were integral aspects of each learning community’s operation. Specifically, the study included 22 participants across three middle school study sites. There were 12 key findings that emerged from the data across the three study locations. The findings revealed the need for regular collaboration, supportive leadership practices, a clear vision and a distinct set of values to guide learning community members. Additionally, the findings highlighted the beneficial aspects of professional learning communities but revealed the need for refinement related to adequate meeting time, supportive structures, and planning. Future research should be conducted across a longer time period with a larger sample size to ascertain if the findings are similar to those that arose from this research. Finally, a recommendation of adding an evaluative component to the learning community was made. This will enable school administrators to regularly monitor the progress of the PLC. This study will support positive change and will provide valuable data that can be utilized at each of the study sites to promote a school culture of collaboration, academic success, and collegiality. This research may potentially result in a more well-organized learning
environment. The findings may serve as the impetus for sustained change and an atmosphere that influences teacher and student learning.
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Chapter 1: Introduction

Historically, the American education system has experienced numerous restructurings aimed at improving schools. In April 1983, The National Commission on Excellence released a report entitled *A Nation at Risk*. This document highlighted the deficiencies of the nation’s educational system. To remedy the weaknesses, *A Nation at Risk* recommended more rigorous academic standards, more stringent graduation requirements, and better teacher preparation (Finn, 2008). A more recent reform undertaken to further address the state of urban schools was the No Child Left Behind Act (NCLB) which took effect in 2002. This statute resulted in more rigorous standards for schools as well as teachers (U.S. Department of Education, 2010). One of the key provisions of this act centered on the improvement of the school environment as well as teacher quality. The Recovery and Reinvestment Act was passed in 2009. This legislation allowed states to compete for $4.5 billion in grants to enact professional development protocols, which included common planning time and collaboration amongst teachers (Battersby & Verdi, 2015). In compliance with these increased demands for accountability, schools have regularly implemented professional development activities to allow teachers to hone their craft.

Public schools across the United States have continuously attempted to improve teacher practice (Jaquith, Mindich, Wei, & Darling-Hammond, 2010). Pedagogues and administrators have examined best practices, implemented a host of professional development workshops, and applied research based-programs (Buehl, 2011; Lee &
Spratley, 2010). Many of these efforts have proven unsuccessful in the design and enactment of an instructional method or educational framework that produces substantial growth in teacher performance (Liu, 2012). In fact, in a recent study, researchers found that 90% of teachers throughout the United States participate in regular professional development, but the large majority found these trainings to be ineffective (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009).

In recent years, the idea of the professional learning community (PLC) as a means of improving teacher expertise, capacity, and knowledge, has become increasingly popular amongst school districts (DeMatthews, 2014). According to Van Driel and Berry (2012), it is important for educators to collaborate, interact, and foster relationships; this collegial contact is an essential aspect of high-quality professional development (Borko, Jacobs, & Koellner, 2010; Little, 2006). Today’s school reform crusade, focused on the redesign and revamping of the nation’s schools, has propelled educational leaders and pedagogues to the forefront of systemic change (Mette & Reiegel, 2018). If properly implemented, PLCs strengthen teacher quality and assist teachers in achieving their goals (DuFour, DuFour, & Eaker, 2008; Eaker & Keating, 2008).

**Problem Statement**

Research has shown that teachers are leaving the profession at alarming rates (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2008; Love & Kritsonis, 2007-2008; Sass, Flores, Claeys, & Perez, 2012). There are 200,000 new teachers hired annually in the U.S. and by the end of the year, approximately 22,000 of them have resigned (Guarino, 2006). Furthermore, one-third of new teachers leave the profession after 3 years, while one-half depart by year 5 (Sutcher, Darling-Hammond, & Carver-Thomas,
In his book, Lortie (1975) identified teacher isolation as one of the chief obstacles to quality teaching, teacher retention, and student achievement. Decades later, researchers have found that one of the biggest contributing factors to the high rates of teacher attrition today, is teachers working in seclusion (Dworkin, 2009; Kardos & Johnson, 2007). Due to professional isolation, teachers feel unsupported and inadequate in meeting the demands of the job (Crafton & Kaiser, 2011). This feeling of frustration and burnout can result in the decline of the psychological and physical health of these individuals (Neveu, 2007). Educators are often overwhelmed by the numerous demands that must be met each day (Crafton & Kaiser, 2011). Research has demonstrated that working in isolation does not have a positive, conclusive, and enduring influence on teacher practice (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Several studies have found that one of the key components of successful teacher professional development is increased opportunities for teachers to collaborate (Lieberman & Pointer-Mace, 2008; Scribner, Sawyer, Watson, & Myers 2007; Tienken & Stonaker, 2007). In fact, numerous studies have shown that one of the major catalysts for continued and long-lasting effect on student growth and teacher effectiveness is the implementation of professional learning communities (Lemos, Hoffman, & Bosker, 2011; Thessin & Starr, 2011; Vescio, Ross, & Adams, 2008). Moreover, in countries such as Finland and Japan, where students regularly outperform students in the United States, collaboration amongst pedagogues is touted as an essential component of instructional improvement (Sparks, 2013).
Theoretical Rationale

One of the major theories frequently cited in relation to professional learning communities is the social learning theory (Lave & Wenger, 1991; Wenger, 1998). This model describes the relationship between shared teaching practice and the skills gained by individuals as they work collectively to bridge knowledge and expertise to strengthen professional practice (Nussbaum-Beach & Ritter Hall, 2012). This theory holds that learning is a social process that occurs within communities of practice (CoP) (Gómez-Blancarte & Viramontes, 2014). The CoP theory will be significant in framing the proposed research and shaping the knowledge base around teachers engaged in PLCs.

The literature related to PLCs highlights the fact that teaching continues to be an isolated profession (Clay, Soldwedel, & Many, 2011; Hadar & Brody, 2010; Stephenson & Bauer, 2010). Thus, some researchers assert that there is a need to revamp the way teachers plan and carry out various components of their lesson planning and instruction (Devine, Meyers, & Houssemand, 2013; Knight, 2009). The existing literature is rooted in the theories that emphasize the social context of teaching and learning and examine the ways in which teachers benefit from working collaboratively through shared visioning and planning. Research shows that high quality interactive opportunities allow teachers to enhance their professionalism (Darling-Hammond et al., 2009). Experiences such as these provide educators with the opportunity to learn from one another and to construct the trust and confidence necessary for solid decision-making (Darling-Hammond et al., 2009; Earl & Timperley, 2009). To remedy the issue of teacher seclusion, several researchers (Cardona, Lugo, & Gonzalez, 2012; Hord, 2004; Horn & Little, 2010) have identified the theory proposed by Lave and Wenger (1991) as a possible solution for
increasing the number of opportunities that pedagogues are afforded to engage in collectively. The CoP framework (Lave & Wenger, 1991) guided this qualitative research study. This researcher drew on the principles of this theory that are related to how adults learn and grow professionally.

Communities of practice and social learning theory. There are several definitions that can be used when describing a community of practice. Hildreth and Kimble (2000) define CoP as “a group of professionals informally bound to one another through exposure to a common class of problems, common pursuit of solutions, and thereby themselves embodying a store of knowledge” (p. 3). Similarly, Wenger, McDermott, and Snyder (2002), refer to CoP as a group of individuals who are united by common issues, desires, and passion about specific concerns. Wenger et al. (2002) believe that the members seek to expand their knowledge and skill by engaging regularly with one another. While the term CoP has become more prevalent, it originated as a central component of Wenger’s (1998) idea that learning results from social participation.

The term community of practice transcends a range of social contexts (Wenger et al., 2002). The members of these groups meet regularly and are unified by shared concerns or desires (Palmer, 2007). Many social groups may be labeled as communities, however, there are three distinct features that set groups apart as CoP (Wenger, 2004). The chief elements of this model include: domain, community, and practice (Wenger, 2004). The domain is defined as shared interest or passion in a specific realm. The domain expresses the groups’ specific purpose and goals. The group is connected through participation, learning, and a common interest. While exploring interests in their domain, members of a CoP interact jointly in various activities and discussions to aid one
another in the major tasks that the group must complete. This is the community aspect of this theory. Participants share information and build relationships based on trust and mutual understanding, and they learn from one another. Members of the community work to develop themselves as practitioners within a specific sector. The participants create a shared collection of resources; this includes experiences, stories, tools, and an assortment of solutions to solve problems that may arise. This self-organized shared practice, coupled with mutual values, help to strengthen individual and group expertise and awareness (Gu, Zha, Li, & Laffey, 2011). These groups are formed because members share a common purpose. Thus, the participants are committed to the group’s success (Cuddapah & Clayton, 2011).

Despite the variation in definition of the term community of practice, it can be surmised that CoP are self-organized groups of peers with diverse skills. These groups are unified by the member’s desire to aid one another through the sharing of information. The CoP’ participants are also interested in advancing their own knowledge.

**History of communities of practice.** The term CoP was first utilized by theorists Lave and Wenger (1991). They initially used the term in explaining the components of situated learning. The learning, they propound, occurs in an interactive environment, in which individuals are engaged in a participatory context. Their groundbreaking analysis of CoP was published in the text, *Situated Learning: Legitimate Peripheral Participation*. Lave and Wenger (1991) initially studied apprenticeship learning models. Their model posited that CoP are widespread and that most individuals in society are engaged in several of them. Whether at school, home, at work, or in civic or leisurely events, individuals, they asserted, are brought together by common activities, and learn through
mutual engagement. Wenger (2007) later expanded on the CoP theory. He asserted that CoP are formed by people who engage in a process of collective learning in a shared domain of human endeavor: a tribe learning to survive, a band of artists seeking new forms of expression, a group of engineers working on similar problems, a clique of pupils defining their identity in the school, a network of surgeons exploring novel techniques, a gathering of first-time managers helping each other cope. CoP are groups of people who share a concern or a zeal for something they do, and they learn how to do it better as they interact regularly.

The CoP concept was adapted by Lave and Wenger (1991) based on a research project that was being conducted by the Institute for Research and Learning (IRL). This company was modeled after the Xerox Corporation’s Palo Alto Research Center (PARC). Lave and Wenger were analyzing apprenticeship and its value as a method for participants to share information. Lave and Wenger (1991) found that learning was not simply an accomplishment between an individual and a master; instead, the researchers recognized that knowledge is a relationship amongst an entire community of people with apprentices with different levels of expertise (Corso, Martini, & Balocco, 2008). Lave and Wenger (1991) observed workers gathering around Xerox machines to share their knowledge and to relay experiences related to repairing office equipment. Within the organization, technicians often contacted colleagues to receive information and suggestions to improve their job performance. Lave and Wenger (1991) concluded that learning is a social activity that is strengthened by participation in a practice.

The concept of legitimate peripheral perception (LPP), as described by Lave and Wenger (1991), is the process by which new members of a community of practice
develop into experienced and integral members of the team. According to LPP, new members of the community initially engage in simplistic tasks. While these activities are low-risk, they are essential to ensuring that the goals of the community are achieved. Through these peripheral tasks, beginners become acclimated to the vocabulary, norms, and guiding principles of the community. As the newcomers become more experienced, they gradually become increasingly integral to the operations of the group. LPP contends that when novices are provided with the opportunity to observe experts, their role and level of expertise improves significantly. On the other hand, LPP maintains that when a newcomer to the community does not interact with experts, there is inadequate growth.

In a subsequent work, Wegner (1998) departed from the concept of legitimate peripheral perception. He instead highlighted the notion of dualities. This is defined as creative tension. Within a community of practice, Wenger contends that the idea of duality between two contrasting forces is the impetus for change and creativity. In this revamped work, Wenger defines CoP more precisely. He identifies the following three dimensions: (a) purpose, (b) functions, and (c) capability. The common purpose that unites the group is known as joint enterprise. This dimension serves to bind the members together as they work to reach their overarching goal. Functions include systems that are implemented to ensure that members are mutually engaged. The interactions amongst participants impact the group’s culture and practices. Moreover, capability involves the sharing of resources that are developed by the community over an extended period. According to Wenger (1998), CoP foster an atmosphere in which meaning is negotiated through participation and reification (Wenger, 1998). Wenger defines the concept of reification as the process of giving form to experience by producing objects. The objects
that the group fabricates and maintains includes procedures, techniques, jargon, forms, symbols, actions, concepts, and mental categories. Through these practices, knowledge is augmented and there is a greater commitment to shared ideas.

CoP do not always remain static or stable; rather, they change over time as members depart and new members join. When a group is created, in the primary stages they are united to complete a specific project. As time elapses, they may develop into a CoP (Lave & Wenger, 1991). CoP have been referred to by a variety of terms including: instructional teams (Knight (2007), community of inquiry, (Garrison, Anderson, & Archer, 1999), teacher learning communities (McLaughlin & Talbert, 2001), inquiry communities (Cochran-Smith & Lytle, 1999), professional learning communities (Hord, 1997), and collegial study groups (Dana & Yendol-Silva, 2003).

More recently, Wenger (2006), made the distinction between a group that simply meets and one that gathers to participate in a CoP.

The term CoP was used to refer to the community that acts as a living curriculum for the apprentice. Once the concept was articulated, we started to see these communities everywhere, even when no formal apprenticeship system existed. And of course, learning in a community of practice is not limited to novices. The practice of a community is dynamic and involves learning on the part of everyone. (Wenger, 2006, p. 3)

CoP were originally designed for use in the business world (Eckert, 2006). Today, CoP can occur in any physical location from the factory floor to the staff lunchroom. Members of the group do not have to physically meet in the same location.
Today, participants in CoP often meet in virtual communities. They collaborate online, through blogs, as well as through mobile phones.

Initially, community of practice was the term applied to most communities that gathered to discuss a specific problem. The fields of business, education, and health communities largely utilized this model. While this framework is still incorporated into these areas, the term has now become synonymous with professional work-oriented groups and government agencies (Wenger-Trayner & Wenger-Trayner, 2015).

**Criticism of the theory.** Communities of practice are not without opposition. Wenger et al. (2002) describe the weaknesses of the theoretical framework in their book, *Cultivating Communities of Practice*. They avow that the very qualities that make a community an ideal structure for learning – a shared perspective on a domain, trust, a communal identity, long-standing relationships, and an established practice, are the same qualities that can hold it hostage to its history and its achievements. (Wenger et al., 2002, p. 141)

An additional challenge associated with CoP is the amount of time that is necessary to participate in a community of practice model that is effective and allows the members to successfully achieve their goals. Today’s organizations are increasingly complex and participants in CoP must be able to navigate the organization’s frequently challenging terrain. Group members are expected to develop the knowledge and capability that is necessary to work efficiently and productively. When unexpected circumstances arise, the members may not be afforded the time to meet to successfully solve difficult issues (Roberts, 2006).
CoP require individuals to work regularly in collaborative settings. One of the most important principles of a CoP is trust. Trust is essential to an effective team. The absence of trust may cause participants to be reluctant to share their knowledge (Roberts, 2006). Conversely, the presence of a trusting environment is tantamount to a higher level of mutual understanding, which emerges within social and cultural contexts (Roberts, 2006). Culture within organizations has a considerable effect on workers and other key stakeholders (Coopey, 1998). For example, adversarial interactions between members of the CoP may not support effective communities of practice and this issue may not be simple to solve.

Another one of the criticisms of CoP is that the framework does not consider the role that outsiders play in the group’s ability to meet its goal. According to Amin and Roberts (2006), the concept of insiders and outsiders is integral to the functioning of CoP. While Wenger’s (1998) model highlights the importance of insiders and outsiders, these researchers provide the example of a CoP in the professional sector. Amin and Roberts contended that while the CoP participants may be open to acquiring knowledge from other CoP in the same profession, the same is not true for different professions or even non-professional sources. Amin and Roberts (2008) posited that exposure and openness to outsiders is crucial for knowledge to be transferred and shared, resulting in positive outcomes for the participants.

CoP are a collective group of individuals who are working towards gaining knowledge in a specific field. Often, the knowledge that is aligned with attitudes and values of those within the community, will likely prevail over information that challenges current identity and practices (Brown & Duguid, 2001). These perceptions and schools
of thought can suppress innovation. The seminal work of Nelson and Winter (1982) further supports this belief. These researchers affirmed that routines within CoP can become commonplace, which results in a stable pattern of interaction and people who may become resistant to change.

One theory that is contrary to the theory purported by Lave and Wenger (1991) is Thomas Guskey’s theoretical framework. Guskey, unlike Lave and Wenger, contended that when teachers work together collaboratively, the change that comes about only lasts temporarily (Guskey, 2014). Guskey argued that long-lasting change will only occur when there is a change in student outcomes that teachers can see. Once educators experience a positive shift in student achievement, Guskey asserts, then teachers’ attitudes and beliefs are impacted, and the changes will be permanently accepted. This is contrary to the assertion that is supported by Lave and Wenger (1991) that the collaboration supplied by the CoP is the chief factor in impacting teacher practice.

**Evidence that the theory works.** Several research studies have revealed that CoP positively impact student achievement, teacher morale, teacher effectiveness, and job satisfaction, school culture, and climate (Ackerman, 2011; Dretzke & Wahlstrom, 2010; Moore, 2010; Supovitz, Sirindes, & May 2010). Furthermore, CoP decrease teacher seclusion and increase capacity and production.

Diaconu, Radigan, Suskavcevic, and Nichol (2011) indicated that CoP are beneficial to teacher growth and expertise. These researchers partnered with educators involved in an in-service program for elementary school science teachers. The participants were each involved in the Rice Elementary Model Science Lab (REMSL). Teachers with varying skills and science capabilities collaborated in a CoP for a full day
each week, for one complete academic year. Within this structure, science content and pedagogy were provided to the 80 participants. Over the course of this 4-year study, scientists and pedagogues partnered with elementary school teachers in a 1-year science lab model. After receiving the information, the teachers then worked together to strengthen their practice. The researchers utilized a mixed method study to triangulate the results. Diaconu et al. (2011) compared the REMSL treatment group with another group of educators who did not work in CoP. The findings revealed that the teachers who worked collaboratively increased their content knowledge significantly. The 2008-2009 students with teachers who participated in the CoP saw an increase in proficiency from 69% on the pretest to 81% on the posttest.

During the 2003-2004 school year, increased accountability standards by the Missouri Department of Education were enacted (Rentfro, 2007). In response, teachers at South Eldon Elementary School decided to create a CoP. During collaborative team meetings, teachers analyzed data, reflected on their teaching, and shared their concerns. Furthermore, members of the CoP created pacing guides and produced common assessments. The educators met twice per week and teachers on all grade levels met for 45 minutes daily for common planning time. The impact of CoP is demonstrated by data released by the state of Missouri related to South Eldon Elementary School. The Missouri Assessment Program (MAP) showed a 24.1% increase in students who were rated advanced or proficient in communication arts. Additionally, there was a 12.2% increase between 2002 and 2007 in the number of first graders who scored on grade level on the Developmental Reading Assessment (DRA) end of the year test (Rentfro, 2007).
Staff members who participated in the CoP have gone on to share their successful practices and strategies at district and state conferences.

The emphasis on collaboration amongst professionals within diverse industries is at the core of this theory. The centralized focus of this framework allowed this researcher to examine and analyze this perspective when assessing the needs of pedagogues in the middle school classroom. This approach holds that an educator who does not possess all the essential skills can attain a deeper level of understanding and capability by working alongside more expert professionals. Despite the criticism associated with this framework, there are several recent studies that have been conducted that highlight the benefits of CoP including: empowering teachers, opening access to new knowledge and skills, and bolstering student achievement.

**Statement of Purpose**

The purpose of this qualitative multiple case study is to examine the effects of professional learning communities and their impact on school culture, classroom pedagogy, and the strengths and weaknesses of the model. This study will also explore administrators,’ teachers,’ and paraprofessionals’ perceptions of how the design, characteristics, and processes of PLCs influence classroom decision-making, and the study will identify challenges and provide suggestions for enhancing the current structure of each PLC.

**Research Questions**

The questions that guided the research are:

1. What are the perceptions of school staff regarding the impact of PLCs on their learning and effective teaching practices?
2. How do PLCs affect classroom pedagogy and the academic environment?

3. What are the strengths and weaknesses of the implementation of a PLC as perceived by the instructional staff?

4. What PLC practices facilitate a change in the culture of the school?

**Significance of the Study**

This multiple case study examined the perceptions of middle school teachers, principals, paraprofessionals, and assistant principals in two urban school districts as related to the effectiveness of the PLC model in relation to professional improvement, development, and collaboration. This study adds to the available literature for PLCs and provides insight into the beliefs of staff who work in and participate in schools in which PLCs are implemented. This study offers knowledge into PLC practice and presents direction and guidance to participating schools or schools that are interested in implementing high-quality sustainable professional learning communities.

This evaluation can be used to advance the professional training of teachers and can serve to strengthen teacher collaboration, boost teacher learning, and produce growth in student performance. These findings will enhance the professional development practices of participating schools by allowing each one to examine and make decisions related to learning community procedures and practices. On a local and national level, a strong need exists for an overhaul and restructuring of the public educational system. Fostering improved learning systems in which pedagogues and students can heighten their learning can potentially hold tremendous social implications.

**Definition of Terms**
**Plickers** – A tool that allows teachers to utilize technology to gather real-time assessment data.

**Professional Development** – Refers to a wide variety of specialized training, formal education, or advanced professional learning intended to help administrators, teachers, or other educators improve their professional knowledge, competence, skill, and effectiveness (Hidden Curriculum, 2014).

**Skedula** – an online communication tool that allows teachers to communicate with parents as related to student grades, homework, and student behavior.

**Teacher Isolation** – Alienation that pedagogues experience without adequate support from peers, mentors, or their school leaders.

**Professional Learning Communities** – Professional learning communities are defined as a group of educators, always striving to meet their own full potential, maximizing student learning by working together to learn, grow, and improve their own professional practice (Hall, 2008).

**Urban School Districts** – Districts that are highly populated in inner cities that consist of high poverty student populations (based on the number of students who receive free and reduced lunch). Districts faced with many social challenges: family dynamics, crime factors, and economic concerns.

**Chapter Summary**

Teacher professional development continues to be the focus of local and national reforms. The teaching profession has long been one marked by isolation and high rates of attrition. This chapter discussed and examined the local context of the research problem. This section presented a theoretical framework for the study including the work
of Lave and Wenger (1991) that highlights the importance of developing collaborative communities within schools. Their theory (1991) offers a practicable framework for moving teachers from isolated classroom environments towards collaborative learning communities. This research study analyzed teachers’ principals’ paraprofessionals’ and guidance counselors’ perceptions of the effectiveness of this model as a means for improving the instructional practice of pedagogues. Chapter 2 provides a review of literature that is pertinent to the topic of this study. Chapter 3 outlines the research methodology. In Chapter 4 the findings are shared and in Chapter 5 the implications are discussed along with recommendations for the future.
Chapter 2: Review of Literature

Introduction and Purpose

This chapter examines the literature related to professional learning communities. To critically analyze the PLC framework, it is essential that a thorough understanding of the key elements of teacher professional development be established. One of the most significant aspects of improving teacher training is to recognize the ways in which adults learn best; this will enable institutions of learning to identify and implement superior professional training. To accurately assess and address the demands for improvement, it is vital for researchers to identify the key attributes of successful teacher training. The literature review for this study was crafted by blending a variety of resources. Peer-reviewed journal articles, dissertations, and research databases enabled this researcher to acquire the materials necessary for examining and analyzing the literature that is included in this chapter. The chapter begins with a historical overview of the evolutionary process that the PLC has undergone. Analysis of empirical studies related to the benefits and barriers to PLC implementation, essential factors for sustainability, and the role of the principal in creating and maintaining PLCs is presented. This chapter concludes by highlighting the characteristics of four PLC models developed for both business and educational settings.

Professional Learning Communities

History. The term professional learning community emerged during the 1980s when reform efforts shifted from the traditional model of teachers working in isolation to
a culture of collaboration. Rosenholtz (1989) conducted an empirical research study about the work environment of educators. Rosenholtz asserted that the most efficient and productive school workplaces encouraged collaboration, fostered an atmosphere in which teachers shared ideas and best practices, and created the opportunity for teachers to improve their instructional practice. Rosenholtz’s most significant finding was that strengthening the bond of teacher collaboration led to increased student achievement and enhanced instructional practice. Despite these positive environments, teachers preferred to work in seclusion. Many of these teachers did not offer support, nor share ideas with their fellow pedagogues. According to Rosenholtz (1989), “Teachers avoid help seeking if they view it as potentially embarrassing or stigmatizing and if it threatens their sense of professional adequacy” (p. 430).

Soon after, additional research was conducted on the culture that permeated many businesses and privately-run organizations. Peter Senge’s book, *The Fifth Discipline* (1990), focused on collaborative problem solving as a means for transforming companies into *learning organizations*. In 2000, Senge transferred the idea of learning communities to the field of education by describing five disciplines for the framework of this model. The five disciplines that Senge believed needed to be present in innovative learning organizations were: (a) systems thinking, (b) personal mastery, (c) mental models, (d) building shared vision, and (e) team learning. In his earlier work, Senge (1990) stated:

The tools and ideas presented in this book are for destroying the illusion that the world is created of separate, unrelated forces. When we give up this illusion we can build “learning organizations,” organizations where people continually expand their capacity to create the results they truly desire, where new and
expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together.” (p. 3)

Senge’s concept subsequently made its way into the educational arena and the concept created the basis for PLCs that are used today in many of the nation’s school systems. While Senge’s (1990) and Rosenholtz’s (1989) findings suggested that there was a greater need for teacher collegiality, teachers in the United States have continued to work in isolation (DuFour, 2011). The PLC method digresses from the isolated teacher method of instruction (DuFour, 2011). The major approach then shifted to a more student-centered focus. In this style, educators work collectively to create a shared mission, incorporate reflective practice into their instruction, and develop and identify instructional strategies that meet the diverse needs of all student learners (Curry & Killion, 2009).

PLCs have gained popularity in many educational settings because of their link to increased student achievement (Foord & Haar, 2008). Scott and Ingels (2007) reviewed data from the National Longitudinal Study and found that students whose teachers participated in collaborative teacher communities performed higher academically than students whose teachers had not.

**Components and characteristics.** There is a vast body of literature on the PLC. Researchers who have studied this field have diverse opinions about the attributes of PLCs. Hord (1997), an expert and renown force in the PLC crusade identified three attributes that were essential for a well-functioning PLC. The first was the facilitative partnership of the principal. This requires the principal to be willing to share leadership with the teaching staff by inviting staff to have input in decision-making. A second
characteristic was intervisitation amongst the teaching staff. This would allow for teachers to receive feedback from their peers to support individual and community improvement. A third trait of a successful learning community was the allocation of time and resources to enable teachers to meet regularly to discuss best practices.

Conversely, researchers DuFour and Eaker (1998) specified that a clear vision of how a learning community looks and how people interact within it will offer insight into the steps that must be taken to transform schools. While Hord (1997) provided specific steps for PLC members to utilize, DuFour and Eaker focused on a set of specific cyclical practices that needed to be incorporated into PLCs and monitored regularly to determine their effectiveness. They also identified the following six traits as essential for an effective PLC: (a) a shared mission and values, (b) collective inquiry into best practices and current reality, (c) collaborative teams focused on learning, (d) action orientation and experimentation, (e) commitment to continuous improvement, and (f) results orientation.

These six attributes are instrumental in creating a collegial atmosphere among individuals with a common goal and mission. Action steps are then carefully planned and executed to meet the goals of the organization. Once the steps have been implemented, the outcomes are analyzed to determine if the objectives have been met and whether any additional actions need to be taken.

In contrast to the work of DuFour and Eaker (1998) in identifying the characteristics of effective PLCs, Reichstetter and Baenan (2007) conducted a study to determine the barriers to PLC implementation. The study was conducted in the Wake County School District in North Carolina. Between December 2006 and January 2007 surveys were disseminated to teachers to obtain their opinions on the learning
communities in which they were involved. The survey results disclosed that there was a need for system-wide training on the proper implementation of PLCs. The study was then extended to the 2007-2008 school year. The second study revealed that as teachers met regularly and established routines and systems for guiding the PLCs, the level of teacher satisfaction with the PLC increased from 71% to 89%. Some of the barriers to PLC implementation identified were: members who were not honest about their weaknesses, the absence of SMART (specific, measurable, attainable, realistic and timely) goals, and the lack of sufficient time for member meetings.

**Professional Learning Communities and Communities of Practice**

Wenger et al. (2002), defined a community of practice (CoP) as a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis” (p. 4). These groups develop informally to meet a common goal (Eckert, 2006). Participation in CoP is voluntary; however, managers work to ensure that members with similar objectives work closely with one another. According to Wenger (2000), executive leaders are responsible for identifying opportunities for CoP to be created, developing processes and practices that will support sustainability, and enacting evaluation protocols to monitor the effectiveness of the framework. Although CoP originated in the world of business, the concept has resulted in far-reaching effects in workplace learning and natural social settings in which individuals strive to accomplish goals collectively (Cashman, Laflin, & Paliokas, 2007). Organizations that possess well-organized CoP have a solid structure that uses human capital to transfer and strengthen the knowledge base of its participants (Li et al., 2009).
Eckert (2006) affirmed that CoP are in existence in many different settings and all members of society participate in multiple CoP, sometimes simultaneously (Wenger-Trayner & Wenger-Trayner, 2015). CoP include: a tribe devising means for survival, a network of surgeons examining new techniques, church groups, and book clubs.

**Effective Professional Development**

Yoon et al. (2007) posited that effective professional development opportunities impact teacher learning and effectiveness. Beginning in the late 1990s, several research studies have been conducted to ascertain the characteristics of effective professional development (Garet, Porter, DeSimone, Birman, & Yoon, 2001; Guskey, 2000; Wilson & Berne, 1999). Many educators are entering the profession unprepared and there is little consensus regarding the components that should be included in teacher training activities (Bayar, 2014).

According to Mizell (2010), effective professional development (PD) will deepen teachers’ understanding of content and differentiation to meet students’ needs, transform mindsets and assumptions, and develop a systematic framework that will eventually produce a change in habits and affect habits. However, a gap exists between ideal practice and the method by which to implement this knowledge (Archibald, Coggshall, Croft, & Goe, 2011). Reeves (2010) posited, “We know what effective professional learning looks like; it is intensive and sustained, it is directly relevant to the needs of teachers and students, and it provides opportunities for application, practice, reflection, and reinforcement” (p. 22).

A 2015 study conducted by the New Teacher Project (TNTP) found very little consensus amongst educators related to the professional development activities that were
most impactful. TNTP focused on three large school districts and one charter network. The study included 10,507 students and 566 school leaders. To identify participants for this study, TNTP analyzed teacher growth using a variety of data sources. These included principal ratings across several evaluations and student test scores. The TNTP looked for teachers whose performance had improved significantly over the past 2 years. The major goal was to identify the mindsets, experiences, or environmental factors that they had in common. The TNTP then distributed surveys to teachers; the focus groups zeroed in on teachers’ training over the previous 2 years. Feedback was also collected from principals.

The researchers hoped to determine the types of professional development as well as the environment and culture that allowed educators to thrive. The responses of educators highlighted the fact that the teachers who responded participated in a wide variety of professional learning activities; this amounted to approximately 150 hours per year amongst teachers who participated in the study. Additionally, the study revealed that while school districts are investing a significant amount of funding into teacher training, teachers are not receiving definitive information about what must be done to bring about long-lasting change in instructional practice. The districts included in the study spent an average of $18,000 annually per teacher on professional training. Despite the time and money being invested into improving teacher practice, more than half of the teachers surveyed did not believe that these efforts improved their practice. Moreover, 1 in 5 teachers stated that they had not received follow-up support such as coaching or mentoring. One in 10 participants reported having regular opportunities to practice the newly acquired skills.
Benefits of Professional Learning Communities

Professional learning communities are advantageous because they foster an atmosphere that allows participants to exchange ideas that enhance and advance teaching and learning (DuFour et al., 2008). If implemented correctly, PLCs provide many benefits to both teachers and students. According to DuFour, Dufour, Eaker, and Many (2006), these professional learning experiences will bolster student abilities and skills because of the emphasis given to experimentation and the exchange of best practices between teaching professionals. Additionally, PLCs can produce greater teacher leadership opportunities which can have a positive impact on the school community by fostering commitment to student learning and creating a favorable school culture (Roberts & Pruitt, 2009).

A 2010 study conducted jointly by the National Science Foundation (NSF) and National Commission on Teaching and America’s Future (NCTAF) further highlighted the advantages of participation in PLCs (Carroll & Foster, 2010). The researchers analyzed almost 200 STEM education research articles and reports. The guiding questions included in the study focused on the impact of STEM teachers’ participation in PLCs on: (a) their pedagogical content knowledge, (b) their instructional practice, and (c) their students’ achievement in STEM subjects. The findings suggested that teachers who participated in learning teams understood the mathematical and science concepts better and felt more prepared to teach these subjects. Because of PLC participation, teachers felt more reform-oriented and their attitudes toward teaching improved greatly. The researchers identified six studies that proved that there is a direct link between teacher involvement in PLCs and student achievement. Furthermore, an expert panel reviewed
the unpublished results from PLCs and reported that the mathematics and science scores of these students were also positively impacted when teachers worked collaboratively.

PLCs can yield positive outcomes for educators’ instructional abilities, which can result in increased student performance. PLCs have “helped teachers learn together as they rethink their practice, challenge existing assumptions about instruction, and reexamine their students’ learning needs” (Barton & Stepanek, 2012, p. 2). According to Weiser (2012), teachers in a PLC contribute to a system that allows teachers to feel supported and better equipped to carry out the duties of their roles. Moreover, Darling-Hammond et al. (2009), contended that collaboration amongst teachers serves as a catalyst for school wide change.

To strengthen this assertion, Barton and Stepanek (2012) asserted that teachers who are members of PLCs become more adept at curriculum planning and creation. Linder, Post, and Calabrese (2012) maintained that PLCs allow educators to tailor and customize their professional training. This provides them with the opportunity to “develop a sense of ownership through self-directed learning” (p. 20).

Barton and Stepanek (2012) propound, “When teachers engage with their colleagues around what really matters in teaching and learning, rather than treating their classrooms as a private domain, both student and teacher benefit” (p. 4). Dating back to 1997, Hord found that PLCs provide several benefits to teaching professionals. This finding was corroborated by Hellner (2008) who found the positive impacts of PLCs to be reduced isolation, greater job satisfaction, higher morale, and less absenteeism.

While research studies have touted the value of PLCs, a study conducted by Wood (2007), found that the collaborative nature of this framework can produce negative
effects. The study was conducted in a mid-Atlantic school district in the United States that had recently begun to participate in PLCs. This district, like many in urban areas, struggled with inadequate resources, a burgeoning immigrant population, and difficulty meeting intensifying accountability standards. Research participants included superintendents, principals, instructional coaches, and teachers. The study consisted of face-to-face interviews, focus groups of key staff members, and observation of PLC coaching presentations/meetings. Data collection lasted for 2.5 years. The field data was subsequently compared to the survey results of 251 learning community (LC) participants. The study yielded several findings. While the initiative had been enacted to bolster practitioner expertise and strengthen collective responsibility, most teachers did not believe that there was a direct link between collaboration and student learning. Additionally, some teachers used the PLC meeting time as an opportunity to discuss topics not related to student success and to make excuses for low student achievement. Third, a substantial amount of time was devoted to team-building exercises rather than inquiry-based discussions aimed at improving teacher instruction and lesson planning to meet the needs of students. Finally, the researchers found that because the established cultural norms of the district were not aligned with the collaborative spirit of the PLC model, sustainability became an issue.

**Transitioning from Traditional Professional Development to PLCs**

The shift from traditional teacher teams to professional learning communities is a challenging endeavor. It is important for schools to first recognize the major differences between interdisciplinary teams and PLCs. The teams provide a natural setting in which to begin a PLC; however, the two models are different (Eaker &
Keating, 2009a; Guarino, 2009). Interdisciplinary teams consist of groups of teachers from different subject areas who work collaboratively to teach the same students. Teachers meet regularly to confer about student needs, plan lessons and activities for students, and detect areas of student need (Flowers, Mertens, & Mulhall, 2000). Little (1982, 2006) examined the connection between school improvement efforts, teacher relationships, and the foundational tenets of the PLC. In an ethnographic study, Little (1982) analyzed six urban desegregated schools. Little found that professional development is cyclical and constant and is best achieved when: (a) teachers engage in frequent, continuous, and increasingly concrete talk about their practice; (b) teachers are frequently observed and provided with useful critiques of their teaching; (c) teachers plan, design, research, evaluate, and prepare teaching materials together; and (d) teachers teach others the practice of teaching. In successful schools, Little (2006) found that “interaction about teaching is consciously and steadily focused on practice, on what teachers do, with what aims, in what situations, with what materials, and with what apparent results” (p. 334). This research is instrumental in properly implementing PLCs.

For Little’s research findings to take root, DuFour et al. (2008) identified three shifts that must occur for members of PLCs to be successful. The initial shift involves a move from teaching to learning. This shift involves changing one’s mindset. This way of thinking must be embraced by all PLC participants and must be embedded in the school’s culture ((Hughes-Hassell, Brasfield, & Dupree, 2012; Maxwell, Huggins, & Scheurich, 2010). A second shift requires a change in teachers’ work patterns and habits. This shift involves teachers moving away from isolation (Ermeling, 2012) to educators collaborating to devise ways to improve and increase student success (Watson, 2014).
The final shift necessitates that a shift to an “ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve.” (DuFour, DuFour, Eaker, & Karhanek, 2004, p. 11) This attention to student results is intended to guide the PLC process in teacher instructional practice, lesson planning, and differentiation, based on students’ needs (DuFour et al., 2004).

PLCs and interdisciplinary teams have some commonalities; however, there are differences. While both frameworks inspire collaboration, the PLC model goes a step further in that the collaboration is coupled with action plans and improvements aimed at strengthening teacher pedagogy and practice. PLCs necessitate complete involvement and commitment from all members. Furthermore, continuous reflection and ongoing dialogue are integral to the PLC process in that it advances learning and ensures that all stakeholders are focused on the end results (Doolittle, Sudeck, & Rattigan, 2008).

**Implementation and Sustainability of PLCs**

There is an abundance of literature related to the benefits for teachers and students, however, there is limited research related to sustainability (Bennett, 2010). According to DuFour and Reeves (2016), “Although many schools around the world have claimed to embrace the PLC process, it would be more accurate to describe the current state of affairs in many schools as PLC Lite” (p. 18). Guarino (2009) posited that PLCs are discussed in educational circles regularly as a technique for improving the skills of pedagogues. However, many schools are not successful in this initiative because they are not implementing and structuring the community based on the essential components. Prior to PLC implementation, schools must establish an agreed upon purpose, focus, and
a set of guiding principles, and decide upon the role of teachers and principals (Pirtle & Tobia, 2014). The chief objective of the PLC is to create a model that is sustainable (DuFour et al., 2008; Foord & Haar, 2008). The most critical role in successful PLCs is that of the teacher and the principal (Richmond & Manokore, 2011). PLCs work best when there is a schoolwide culture of collaboration and the opportunity for rich dialogue and discussion is present. The tenets of collaboration and communication eliminate the culture of isolation that is prevalent in many traditional classrooms throughout the country (Burke, Marx, & Berry, 2011). The most effective collaboration within the PLC framework requires teachers and leaders to regularly reflect and work with others to attain common goals and effect change (Nelson, 2009).

According to Roberts and Pruitt (2009), pedagogues who participate in PLCs can be grouped based on the following categories: (a) teachers as colleagues, (b) teachers as leaders, (c) teachers as learners, (d) teachers as pedagogues, and (e) teacher-parent relationships. PLCs that are impactful and capable of effecting change require teachers to have a firm understanding of their role in the PLC (Owen, 2014). It is essential that educators recognize that their collaborative efforts are vital to the PLC’s success (Owen, 2014). Kohm and Nance (2009) contend that, “the ultimate success of any improvement depends on the behavior of teachers, and when good teachers work together, they support one another’s journey toward better instruction” (p. 67). Senge (2000) posits that “drive-by” (p. 385) staff development efforts, which are frequently single session workshops, are often misaligned with what is occurring in classrooms and do not address student needs. This method of professional development contradicts the PLC framework which
consists of regular collaborative exchanges that are synonymous with effective professional development (Darling-Hammond et al., 2009).

As educators become increasingly committed to creating sustainable PLCs in their schools, a team culture emerges that creates a classroom culture that nurtures students. Additional benefits of the PLC are: greater teacher satisfaction, increased morale, a deeper, stronger understanding of the content, and commitment to systemic change (DuFour et al., 2008). While sustainable PLCs have proven valuable to teachers and students, Darling-Hammond et al. (2009) attested that teachers across the country had fewer opportunities to engage in professional development than they had 4 years earlier. The report of these researchers’ findings was published by the National Staff Development Council (NSDC). The researchers analyzed data from the Schools and Staffing Survey (SASS) and the 2004-2005 Met Life survey. They found that the structures and supports necessary to maintain PLCs were not present in many schools nationwide. Additionally, based on teachers’ responses, much of the individualized professional development provided to teachers is failing to address areas of need such as: classroom management, teaching special needs students, and strengthening content knowledge. Wei et al. (2007) contended that:

The low levels of teachers’ perceptions of their influence on school policies and low levels of agreement on cooperative effort and coordination among teachers are symptomatic of the lack of school governance structures and professional communities that involve teachers in collective decision making and problem-solving. (p. 27)
The Role of the Principal in PLCs

The existing body of literature related to PLCs highlights the importance of the principal in implementing high-quality professional development, which is critical in improving teachers’ instructional capabilities. Principals serve in a unique role in that they influence the collaboration that occurs amongst teachers (Louis et al., 2010). Portin et al. (2009) suggested that principals are significant in either helping or hampering their schools’ ability to achieve success. Similarly, several researchers have indicated that the instructional leader is instrumental in maintaining a clear focus on accomplishing the school’s mission and ensuring that students learn (Blase, Blase, & Phillips, 2010; Smylie, 2010). The instructional leadership of the principal is a vital component in the overall success of schools (Blankstein, Houston, & Cole, 2010). One of most important responsibilities of principals is to promote an atmosphere of collegiality and collaboration (DuFour et al., 2004). To assess the extent to which principals shape the adoption and implementation of PLCs, Buttram and Farley-Ripple (2016), analyzed the impact that principal leadership has on teacher collaboration, including PLCs. The researchers focused on three aspects of instructional research: (a) building a culture of high expectations for students, (b) enhancing teacher knowledge and skills, and (c) allocating and managing resources. The mixed methods study included interviews, observations, and document analysis. Data was gathered during the 2010-2011 school term from four elementary schools in two districts in Delaware. Districts were chosen based on size and diversity in the student population. The final selection of schools to be included in the study was made by the superintendent of the two districts. Each superintendent identified two schools: one in which data driven instruction was considered a strength and one in
which it was recognized to be an area of improvement. The schools were located in districts that had been mandated to enact PLCs.

The researchers acknowledged that this method for identifying a sample of schools was fallible; however, they maintained that the positionality of the school superintendents allowed for the best assessment of school practices. Semi-structured interviews were conducted with nine central office administrators whose responsibilities centered on the areas of curriculum, instruction, accountability, and data. Additionally, interviews were utilized with 10 school administrators of four schools. Buttram and Farley-Ripple (2016) participated in 21 school site visits which included observations of school leadership gatherings, professional development sessions, and PLC meetings. Documents including school improvement plans, reports on grade-level data, and meeting agendas and minutes were analyzed. Finally, data from the Delaware Department of Education (DDOE) were used by the researchers to gain a better understanding of the DDOE’s state and district approaches and mandates to PLC implementation.

The research team used the qualitative data to design a survey related to PLC practices. The survey was administered to all instructional staff in each school. There was a combined 80% response rate amongst three of the schools and a 60% response rate from staff at the fourth. Despite the emphasis on PLCs’ importance to school improvement and instruction, the survey revealed significant disparities in the extent to which principals communicated the importance of this framework in guiding school development. The principal at one school, who was referred to as A1 by the researchers, indicated that the PLC was a vehicle through which team collaboration and teacher leadership could be developed. A1 emphasized the importance of fostering a
collaborative environment in which lesson planning and shared activities would enable teachers to achieve their goals.

Principal A2 held longer-term expectations. This leader asserted that the staff in this school was becoming more adept at analyzing data, but the teams were at different stages in terms of identifying instructional goals and subsequently carrying them out. The principal identified as A1 worked to establish a culture of teacher development, shared leadership and high expectations. Principal A2 was a new principal and focused instead on the mechanics and stated that “he was learning along with the teachers.” A2 drew on the district’s recommendations for promoting a collaborative culture while instituting the PLC model. On the other hand, Principals B1 and B2 were accustomed to PLCs in their schools and did not place significant emphasis on employing the state and district mandates in shaping the culture of their schools. The research revealed that all four principals expected teachers to analyze data to make decisions related to lesson planning, differentiating instruction, and aligning pacing across classrooms and grade levels. Furthermore, within district A the types of supports offered to the two schools differed greatly. At school A, survey results showed that 92% of teachers reported that specialists attended most or every meeting; 60% of respondents reported that an administrator attended most or every meeting. In school A2 attendance at PLC meetings by specialists was periodic. The research findings confirm the belief that school administrators influence “who participates, when and how often, and what data is available” (Buttram & Farley-Ripple, 2016, p. 10). The limitations of the study were a small sample size as well as the fact that teachers could self-report, which might not have fully captured all the important features of teacher practice.
DeMatthews (2014) conducted a qualitative study about how principals distribute leadership to produce and maintain PLCs in six western Texas elementary schools. The schools were located in two districts: the Bravo Independent School district and the Mesa Independent School District. Similar to the study by Buttram and Farley-Ripple (2016), the participants for the study were chosen based on the recommendation of district administrators. Informal surveys were distributed to principals and local university faculty with knowledge of school leadership practices and protocols. Another commonality to the Buttram and Farley-Ripple study (2016) is that the researchers collected data through in-depth interviews with principals, assistant principals, instructional coaches, teachers, and university faculty. Each interview lasted 35-60 minutes and the questions centered around: (a) PLC structure, (b) the role of administrators and pedagogues, (c) school culture around teacher learning, and (d) perceptions related to how PLCs aided or impeded teachers’ in their daily tasks. Additionally, 10 PLC meetings were observed in each of the six participating schools. Data collection and analysis were done concurrently.

The DeMatthews (2014) study differed from that of Buttram and Farley-Ripple in that the participating district superintendents, central office principals, and teachers received their degrees and training from the same institutions. Each school fit the profile of an effective PLC. Most of the staff held the following beliefs: professional development strengthened their craft, teachers were supportive of one another, and school culture encouraged trust and collegiality. The findings indicate that there is a need for long-term, sustainable solutions for solving problems and remedying concerns amongst teaching professionals.
The principals who participated in the study conducted by Buttram and Farley-Ripple (2016) were more focused on the implementation of the PLC model. Time was spent on scheduling, establishing norms, and writing SMART goals. On the other hand, the principals in the study examined by DeMatthews (2014) were invested in providing opportunities for teachers to become leaders. These leaders asserted that PLCs were most successful when teachers were able to take a greater role in leadership activities.

**Barriers to PLC Implementation**

The existing research related to PLCs has highlighted the benefits of this framework (Danielson, 2011; Hord, 2008; Leech & Fulton, 2008; Linder et al., 2012). Despite these findings, some scholars have criticized the model and have remained uncertain about this approach (Cameron, McIver, & Goddard, 2008; Dooner, Mandzuk, & Clifton, 2007; Lujan & Day, 2010). One of the chief challenges to sustainable PLC implementation is the inability to incorporate all of the essential components: (a) shared vision, values, and goals, (b) shared leadership, (c) collaborative learning, (d) supportive conditions/trust, and (e) shared personal practice (Eaker & Keating, 2009b; Hord & Somers, 2008). While the popularity of PLCs has increased amongst researchers, school leaders, and educational policymakers, (Nehring & Fitzsimons, 2011; Sleegers, Den Brok, Verbiest, Moolenaar, & Daly, 2013), Eaker and Keating (2009b) cited the absence of a shared vision and limited focus on student achievement to be the main causes of failures in PLC implementation. Often, educators are willing to institute instructional changes with a very narrow understanding of the PLC framework (Owen, 2014). As a result, teachers lack a solid understanding of the most significant aspects of the PLC: to improve their instructional practice and to improve student learning (Vescio et al., 2008).
In fact, Blankenstein (2009) posited, “It is more common to find school professionals who say they are part of a learning community than it is to actually find PLCs in operation” (p. 51).

Westheimer’s (1999) seminal study conducted with teachers from two schools in California highlights the challenges of creating and maintaining a PLC. The selected middle schools were regarded by local educators as locations in which strong PLCs existed. The schools were identified following informal discussions with school leaders, teachers, district administrators, and researchers. These discussions were conducted prior to selecting participant schools to gauge the level of commitment of school personnel to implementing a high quality and efficient PLC. A case study approach was used to gather pertinent information, including participant observations and interviews. Westheimer analyzed research reports, profiles, and newsletters in addition to visiting several schools to ascertain the level of commitment to enacting and sustaining the PLC model.

Data was collected over a 15-month span. In addition to observations during school hours, data was also collected in between classes and afterschool. All teachers agreed to participate, and the identities of subjects were kept confidential through code names and pseudonyms. Preliminary interviews were utilized to garner information about the organization, beliefs of the staff, and the culture of each workplace. Subsequent interviews focused on teachers’ and administrators’ perceptions of the norms, behaviors, and specific events that contributed to or hindered the formation and maintenance of the PLC. Westheimer observed staff meetings, staff development sessions, retreats, and informal discussions among teachers during lunchtime. Collection
of data also included gathering information from documents including: meeting agendas, newsletters, brochures, and memos.

While the participants at Wright Mills Middle School taught different grades, the teachers who were selected from Brandeis Middle School all taught sixth grade. Brandeis is located within the Bayland Unified School District. The school is in an upper middle-class suburb. Approximately 6% of the population is below the poverty line and 1 in 10 students is designated Limited English Proficient (LEP). Many of Brandeis’ educators reported that their colleagues were dedicated to their profession and the sharing of best practices. As such, the sixth-grade team met weekly and the teachers shared common planning time.

Despite the regular meetings, the PLC model that was in use at Brandeis was one in which teachers operated autonomously within their own classrooms and incorporated strategies that would benefit students and maximize their individual instructional capabilities. The teachers subsequently met to discuss areas of success. This approach is similar to doctors who work in individual practices but convene to share successful strategies and practices at conferences and formal and informal meetings. The teachers at Brandeis also used meeting times to reflect deeply on existing practices and to plan individual lessons. This type of PLC, “Embodies an individualist orientation to personal growth, privileging individual rights and responsibilities over growth through relations with others” (Westheimer, 1999, p. 11). The researcher found that the teaching community at Brandeis was committed to maintaining a respectful and supportive environment.
Westheimer (1999) analyzed Brandeis’s PLC based on four essential components that social theorists have identified as being essential for effective and sustainable PLCs. The features that were the basis for analyzing the PLC were beliefs, participation, interdependence, and meaningful relationships. Teachers at Brandeis identified the right of everyone to teach what they wanted in the manner that they found to be most impactful, as the most significant shared belief amongst teaching staff. One teacher stated, “You’re not going to be punished because you didn’t do what you were supposed according to what the group decided” (Westheimer, 1999, p. 10).

Participation at Brandeis fell into several categories: above ground, or physical attendance at meetings, underground participation, which involved casual conversations, and non-participation, or silence. Third, interdependence was evident in curriculum sharing and common planning. Finally, meaningful relationships occurred outside of school and Brandeis teachers expressed concern for one another’s well-being.

Unlike Brandeis, Wright Mills Middle School is in an urban area. The school is comprised of the following ethnicities: 38% Hispanic, 14% Chinese, 9% African American, 6% Filipino, and 20% White. While the PLC structure at Brandeis allowed for pedagogues to set individual and pedagogical goals to develop individual teaching styles, the framework at Wright Mills emphasized collaborative learning. This is evidenced by the fact that teachers each participated in three to four committees, planned interdisciplinary lessons, and attended family and department meetings regularly. Contrary to the interactions of teachers at Brandeis, there was tension amongst teachers at Wright Mills. Many teachers believed that there was an in group and an out group. Although conflicts and disputes were often discussed in hallway conversations,
Westheimer (1999) discovered that teachers at Mills were more likely to discuss conflicts openly in faculty meetings and other settings.

The vision for teaching was described differently by teachers at Mills and Brandeis. Eran, a sixth-grade social studies teacher at Mills described the ideal vision for the school as being able to reach out to colleagues at any hour to share ideas that can subsequently be used to improve the quality of education that students receive. Westheimer’s (1999) study indicated that while Brandeis’ PLC focused on teachers’ individual autonomy, the community at Mills promoted structures that fostered collective participation amongst all educators. Both institutions operated as PLCs, however, Westheimer’s research revealed that there was an absence of research, that solidified for educators, school leaders, and practitioners, the organizational factors that contributed to the creation and sustenance of PLCs.

Westheimer’s (1999) study emphasized the importance of the link between belief systems of educators at these schools in relation to the maintenance of the PLC. While the ideals at Brandeis nurtured independence and self-sufficiency, the culture at Mills stimulated inclusiveness, community, and collegiality. Westheimer did not explicitly find that one system of beliefs was more impactful than the other; however, Westheimer specified that ideological differences impacted the type of PLC. Specific beliefs significantly affected the extent to which pedagogues were actively involved in the PLC. Both learning community models are sustainable, however, norms and expectations must be unambiguous and structural, and procedural steps must be established and relayed to all PLC participants.
Similar to Westheimer (1999), Lujan and Day (2010) conducted a study on the impact that school culture has on the creation and sustainability of the PLC model. The study was qualitative in nature and the researchers’ main goal was to ascertain the perceptions of teachers and staff members about PLCs in a single elementary school in the Southeastern United States. An open-ended survey was administered by an outside organization in addition to one-on-one meetings and direct observations of PLC meetings. Lujan and Day (2010) examined the PLC model and its impact on roadblocks to collaboration. There were two primary research questions: (a) what was the effect of the implementation of PLCs on roadblocks to collaboration among teachers? and (b) if roadblocks were addressed did the collaborative culture change? While Westheimer’s (1999) study focused on teachers’ views, Lujan and Day (2010) asked 37 certified employees to participate in the research that was being conducted. Administrative staff, the school-based researcher, and any employee who did not participate in the PLC meetings were excluded from the study. Of the 37 participants who were invited to participate, 36 accepted.

The participants in the Lujan and Day (2010) study included: two White males, one Native American male, 30 White females, and three Black females. Of the participants, 19 held a bachelor’s degree, 16 possessed a master’s degree, and one held an advanced certificate. All participants were certified in their respective license areas. Ten participants had less than 5 years of experience while seven had been employed in the school district for more than 20 years. The researchers used the definition of PLCs created by DuFour et al. (2006) and DuFour et al. (2008) to assess the effectiveness of the PLC that had been implemented at a single elementary school. To collect data, the
school-based researcher observed several meetings while simultaneously recording notes related to the meetings’ content and non-verbal exchanges amongst the members. The school-based researcher monitored two PLC teams; these groups of teachers were selected based on scheduling. Because the school-based researcher needed to observe the groups for 3 months, these two teams were chosen based on shared availability.

In the Lujan and Day (2010) study, the survey that was utilized contained 20 open-ended questions. Prior to the survey administration, several background questions were included along with the consent form. Additionally, quantitative survey data from the High Five Regional Partnership for High School Excellence was examined. This was a joint venture between five school districts, including the institution that was chosen for this study, and it was dedicated to improving schools. Coding was completed using Atlas.ti software. Interview transcripts, survey responses, and observational notes were coded using a priori themes.

The findings from the Lujan and Day (2010) study revealed that there were three main barriers to PLC implementation: (a) time restraints, (b) isolation amongst educators, and (c) an organizational culture that did not promote collaboration. On the other hand, Westheimer’s (1999) study focused more on which type of PLC model was most advantageous as opposed to specific factors impacting implementation: a collaborative/interdependent model or a model that allowed teachers to individualize instruction and then to subsequently meet to discuss accomplishments and failures. Similar to the findings of Lujan and Day (2010), the teachers at Brandeis felt that the feeling of isolation was one of the biggest contributing factors to a PLC that was not viable and sustainable.
Lujan and Day (2010) included several recommendations to limit the roadblocks to PLC implementation. They encompassed the following:

- “time must be kept sacred;
- include deep discussions about planning, instruction, and assessment;
- training for new faculty;
- shared planning time during the school day” (Lujan & Day, 2010, para. 12).

Based on interviews and observations, one of the challenges to beginning a PLC was that outsiders with their own agendas sometimes attended the meetings and these individuals would divert the members away from the key agenda issues that needed to be addressed. The researchers recommended that when an outsider desires to participate in PLC meetings that the members first decide if the item to be discussed aligns with the goals of the organization. If it does not, a separate conference should be held. If this occurs, the nonmember should be made aware of the norms, including time limits for discussion.

The second recommendation that Lujan and Day (2010) proposed was the identification of a time that is solely dedicated to discussions about planning, instruction, and assessment. This is important for creating high quality lessons and assessments that meet the needs of a diverse population of student learners (Stiggins & DuFour, 2009). Moreover, Protheroe (2008) asserted that PLCs allow pedagogues to strengthen instruction. Furthermore, Lujan and Day (2010), suggested that shared planning time be embedded in PLC sessions. Many of the educators who participated in the Lujan and Day (2010) study indicated that there was a need for more meetings both with teachers of similar subject matter and also with those who taught other subjects. Participants also
specified that the opportunity to meet with non-classroom staff including speech/language pathologists, social workers, guidance counselors, and school psychologists, would be beneficial in gearing instruction that was directly concentrated on these varied skills and would make for enhanced teaching and learning. Finally, these researchers believed that maintenance of PLCs requires that training be available for all new staff members. According to Lujan and Day (2010), it is vitally important for administrators and hiring staff in schools that are utilizing the PLC model to ensure that newly hired teachers are willing to wholeheartedly engage in the PLC process. Novice members must be willing to adhere to the norms that govern the PLC. Even if new PLC participants have engaged in PLCs in previous schools, the current school must arrange for training. As evidenced by Westheimer’s (1999) study, all schools do not implement the PLC in exactly the same way. Moreover, the training of newly hired staff on PLC protocol is significant because the attrition rate is highest amongst this group. Relationship building is central to a successful PLC and this process improves over time. Therefore, for positive and long-lasting connections to be made, teachers must support the PLC and be willing to be held accountable for their learning (Linder et al., 2012).

Although educators believe that collaboration has many benefits, many believe that there simply is not enough time to design and preserve the PLC (Rismark & Solvberg, 2011). Hughes-Hassell et al. (2012) contended that the mounting number of teacher responsibilities has a detrimental impact on the sustenance of learning communities. The demanding schedules of teachers and school leaders results in the unwillingness of staff to participate in activities that they deem to be insignificant
Therefore, greater effort must be made to establish the PLC process as a method that should become an integral component of the school day.

**Professional Learning Community Models**

Educational leaders have long tried to transform schools into collaborative communities that are far removed from the isolated classrooms of years past. In the 1980s, practitioners and researchers greatly focused their efforts on analyzing the impact that the work setting had on workers (Deal & Kennedy, 1982). These researchers reported on the methods that business and private sector managers used to analyze the culture of their organizations as a means of effecting change. Later, the works of Senge (1990), Block (1993), and Galagan (1994), stressed the importance of celebrating the work and contributions of individual staff members. These researchers also highlighted the significance of supporting the collective efforts of staff in activities such as vision development, problem identification, problem resolution, and professional growth. In the business sector, this system of collaborative exchange became known as a learning organization (Hord, 1997). The business literature soon began to permeate the educational sector as educators, policy makers, and practitioners investigated ways in which the practices employed by business managers could impact the school system (Hord, 1997). Fullan (1991) examined the teacher workplace and recommended “a redesign of the workplace so that innovation and improvement are built into daily activities of teachers” (p. 353). This new school of thought combined both the learning organization and learning community to develop a framework that served as the basis for the PLC framework of today (Senge et al., 2012).
Kruse, Louis, and Bryk (1994) created the initial model called the social based learning community. This model was not the first one to focus on student learning and collaboration; yet, it was the first that included the tenets of reflective dialogue and sharing amongst teachers as a catalyst for eliminating teacher isolation. Kruse et al. (1994) argued that a strong PLC should encourage teachers to work together to develop a shared understanding of how students learn best, produce activities and lesson plans that enhance instruction, and provide innovative approaches to staff development. The researchers identified these conditions for effective PLCs by examining teacher surveys in 15 restructuring schools. This research also revealed that the elementary school teachers in the sample had a stronger sense of community than educators in the middle school.

While Kruse et al. (1994) focused on the factors of the PLC that would positively impact teachers, Newmann and Wehlage (1993) devised five standards of authentic instruction that would be valuable for strengthening students’ cognitive ability. Newmann and Wehlage (1993) concentrated specifically on the examination of authentic forms of student achievement. Three criteria were used to develop five standards for authentic instruction: (a) students construct meaning and produce knowledge, (b) students use disciplined inquiry to construct meaning, and (c) students produce final products including performances that provide real world experiences. The researchers discovered that there were two persistent challenges – conventional instruction did not allow students to think critically and the work that was given held no value beyond the classroom door. To remedy this issue a five-standard scale was created. The five standards were: (a)
higher order thinking, (b) depth of knowledge, (c) connectedness to the world, (d) substantive conversation, and (e) social support for student achievement.

One of the most impactful PLC creators was Hord (1997). She was commissioned by the Southwest Development Laboratory, a behavioral and social science research organization. Through her work and review of existing literature, Hord (1997) developed a comprehensive list of components that were necessary for sustainability of PLCs. The attributes that Hord (1997) identified were: supportive and shared leadership amongst the staff and the school leader, collective creativity which would allow the staff the opportunity to showcase and share their respective talents with one another, shared values and vision, supportive conditions, a culture that needed to be created by all staff to ensure that each member felt valued as a vital PLC participant, and shared personal practice, which involves teachers sharing their best ideas and practices from their repertoire of teaching skills.

More recently, Danielson (2011) designed the Framework for Teaching Evaluation Instrument in which PLCs are regarded as, “organizations whose full potential is realized only when teachers regard themselves as members of a professional community” (p. 82). In component 4d of Danielson’s framework, entitled “Participating in a Professional Community,” several elements of the component relate to the PLC model: (a) relationships with colleagues, (b) involvement in a culture of professional inquiry, and (c) receptivity to feedback from colleagues. Each component of the Danielson model is rated using a rubric. For educators to be rated distinguished, the teacher must demonstrate strong relationships with colleagues characterized by “mutual support and cooperation,” and promote a culture of professional inquiry, (p. 87).
Distinguished educators, as per the Danielson (2011) model must demonstrate and maintain a relationship with other staff members that inspires sharing, planning, and working together toward advances in instructional capability and student success.

Chapter Summary

Teachers have traditionally worked in isolation and faculty interaction is often limited to casual everyday talk rather than in-depth discussions about topics that are instrumental in impacting quality teaching and student achievement (Hadar & Brody, 2010). PLCs have proven to be a valid means by which schools can be transformed (DuFour et al., 2008). When properly implemented PLCs have proven to be an invaluable tool in bolstering teachers’ instructional capabilities (Darling-Hammond & Richardson, 2009; Sargent & Hannum, 2009). While the literature surrounding PLCs has emphasized the advantages of this model, successful implementation has been challenging (Hord & Sommers, 2008; King, 2014; Lujan & Day, 2010). Despite these shortcomings, PLCs provide a collaborative framework that allows for the professional growth and advancement of teachers’ effectiveness over time and is well matched with adult learning styles (Huffman, 2011). The full benefits of PLCs can be realized when school leaders establish an environment that encourages collaboration and collegiality (Mindich & Lieberman, 2012).

Collaboration is central to PLCs; it involves the engagement in shared practices to construct meaning from everyday experiences. These collective policies and procedural guidelines are identified as integral to professional development because they foster an atmosphere for pedagogues to share ideas and reflect upon and enhance their instruction (Daly & Finnigan, 2011). This study on teachers’ perceptions of the PLC model focused
in an area that needs further investigation because of the paucity of research related solely
to middle school teacher attitudes. Furthermore, the existing body of empirical data
revealed that collaboration positively impacts teacher instructional capabilities and
increases student achievement. These positive effects promote the value of this research.
Chapter 3 will provide a thorough description of the research design and methodology
that was used to carry out this study.
Chapter 3: Research Design Methodology

Introduction

This chapter describes the methodology for this qualitative multiple case study which examined faculty perceptions and views of how professional learning communities (PLCs) affect instructional practice, student achievement, and school culture. Chapter 3 presents an introduction of the topic, explains the focus of the study, provides a justification for the design, and states the research questions. It also describes the research context and the participants in addition to the proposed data collection process. The primary purpose of the study was to examine the perceptions of middle school staff as to the effectiveness of professional learning communities within their schools using the Professional Learning Communities’ Assessment revised (PLCA-R) questionnaire created by Olivier and Hipp as well as semi-structured interviews.

As accountability within the public educational system has increased, reform efforts have intensified and become more focused on bettering student achievement, teacher instructional practice, supportive leadership, and enhancing overall school improvement (Carlisle, Correnti, Phelps, & Zeng (2009); Isore, 2009). Implementing high-quality PLCs is one widely touted method for accomplishing these goals (Deal & Peterson, 2009; Hofman & Dijsktra, 2010). Scholars concur that collaboration improves teachers’ performance and effectiveness, develops a strong professional culture of trust and support, and strengthens decision-making and collegial relationships (Gates &
Researchers and scholars contend that many educators are ill-prepared to meet the increasingly complex challenges of the classroom environment (Hall, Strangman, & Meyer, 2009). Therefore, it is essential to bolster the skills and knowledge of school faculty to ensure that all staff members are equipped with the skills necessary to educate diverse student learners. The PLC is a framework that enables teachers to collaborate to plan and implement instructional strategies, devise common assessments, and engage in collective inquiry and action research (Levine & Marcus, 2010). Furthermore, this model allows staff to have a shared mission and vision, heightens the focus on student learning, and fosters shared leadership and decision-making (Hord & Hirsch, 2008).

In this study, a case study design was utilized. Denzin and Lincoln (2011) acknowledge that this type of qualitative paradigm is “broad and can encompass exploratory, explanatory, interpretive, or descriptive aims” (p. 17). This study explored and investigated the insights and observations of PLC participants related to the effectiveness of the framework. The case study design enabled this researcher to examine professional learning communities within a real-life context. This study allowed for the generation of data within the natural environment in which the phenomenon occurs. The multi-case study design allows for in-depth interpretive analysis of each individual case and a cross-case examination of the effectiveness of the PLC framework. A case study is a thorough explanation and analysis of one object, occurrence, or group (Glesne, 2011; Merriam, 2009).

Numerous studies have revealed that teacher attrition is one of the most challenging issues facing the American educational system today (Barnes, Crowe, &
Schaefer, 2007; Borman & Dowling, 2008; Marinell & Coca, 2013; National Commission on Teaching and America’s Future (NCTAF), 2007). In studies conducted with American teachers, the annual attrition rate increased 41% from 1987 to 2008 (Ingersoll & Merrill, 2010). Furthermore, by their second year, 29% of teachers are thinking about departing from the profession and 10% specified that they had already made the decision to leave (O’Brien, Goddard, & Keeffe, 2007). A study conducted by the NCTAF (2007) found that teacher turnover costs school districts $7.3 billion annually to recruit, hire, and train new pedagogical staff. One of the major reasons for these teachers’ exodus from the teaching field was isolation (Blasé, Blasé & Du, 2008; Hadar & Brody, 2010; Stephenson & Bauer, 2010). Furthermore, the research posits that teacher isolation is associated with increased stress levels, burnout, and increasing attrition rates. Developing a structure which provides support for teachers in a collaborative setting is a significant factor in improving content knowledge, instruction, and assessment, as well as fostering long-term commitment to enacting systemic change (Dufour et al., 2008; Barton & Stepanek, 2012; Blanton & Perez, 2011).

The current climate of increased responsibility and high-stakes assessments has resulted in increased stress for school faculty (Dworkin & Tobe, 2014). School leaders are facing increased pressures to present solid data that demonstrates that school initiatives are having a positive impact on student learning and the school climate (Dworkin & Tobe, 2014). Additionally, the recent Every Student Succeeds (ESSA) legislation has added to the growing accountability standards by mandating that students are prepared for college and careers (Chenoweth, 2016; McGuinn, 2016). This has resulted in schools, districts, and state governments intensifying the focus on teacher
learning and preparation (Hord, Roussin, & Sommers, 2010). This is evidenced by more
rigorous teacher observations and more advanced student achievement mandates (O’Day
& Smith, 2016) for novel ways in which to develop and implement long-lasting change
both in the classroom as well as in collaboration, planning, and culture (DuFour &
Mattos, 2013).

**Research Questions**

The study’s purpose was to examine staff members’ perceptions of the impact that
the professional learning community had on instruction, school culture, and student
achievement. The researcher utilized a qualitative approach that included semi-structured
interviews in addition to the PLAR-R questionnaire to obtain responses to the following
research questions:

1. What aspects of school culture are impacted by the use of PLCs?
2. How do PLCs affect classroom pedagogy and the academic environment?
3. What are the strengths and weaknesses of the implementation of the PLC as
   perceived by the instructional staff?
4. Do school personnel perceive that collaboration within the PLC affects
   student achievement?

**Research Design Methodology**

A qualitative multiple case study design anchored this research that examined the
effectiveness of the PLC model and its impact on school culture from the perspective of
teachers, principals, and paraprofessionals, and assistant principals who participate
in/oversee this framework. A qualitative case is “an in-depth exploration of a system
based on extensive data collection (Creswell, 2002, p. 485). The case study design
allows for the perceptions and views of respondents to generate data. A case study examines an individual, phenomenon, or event for the express purpose of understanding an important research problem with greater clarity (Mills, Durepos, & Wiebe, 2010). The focus of this study is to describe, interpret, and explain the experiences of individuals. Rich, thick descriptions (Creswell, 2014) were included concerning respondents’ perspectives on PLC involvement and the impact that it has. According to Yin (2003), the multiple case study approach that was undertaken has several benefits:

Benefits with a multiple case study are that the writer is able to analyze the data within each situation and across different situations. The writer studies multiple cases to understand the similarities and differences between the cases and therefore can provide the literature with important influences from its differences and similarities. Other benefits are that the evidence generated from a multiple case study is strong and reliable, and the writer can clarify if the findings from the results are valuable or not. (Yin, 2003, p. 11)

Sampling. This researcher conducted a qualitative study over an extended time period with a small group of school faculty, including principals, teachers, assistant principals, and paraprofessionals. This type of investigative research, according to Lodico, Spaulding, and Voegtle (2010), is a form of research that produces detailed understanding of groups, individuals, events, or specific phenomenon.

Suresh, Thomas, and Suresh (2011) avow that sampling is a subset of a specific segment of society which serves as an unbiased representation of the larger population. Mertens (2015) defined a sample as “the group that you have chosen from your population from which to collect data” (p. 4). This research employed a purposeful
sample. According to Van Manen (2014), a researcher who uses a purposeful sample does so to select a group based on their knowledge and verbal eloquence to describe a group or culture to which they belong. Furthermore, Patton (2015) believes that purposeful sampling yields information-rich cases that are beneficial for in-depth studies. The participants who were included in this research study provided a myriad of viewpoints surrounding the PLC framework based on their previous experiences as members of this collaborative model.

**Research Context**

The study was administered in three middle schools which are comprised of grades 6-8, with a total of 1,895 students, 138 teachers, 32 paraprofessionals, seven assistant principals, and three head administrators. This study was conducted in two urban school districts (District A - two schools; District B - one school) in New York City, which are part of the largest school system in the nation. The districts in which these schools were located are comprised of 45 elementary schools, 21 middle schools, 24 high schools, and five alternative schools. District A is responsible for educating 38,535 students while District B has a total enrollment of 13,191 students.

For confidentiality, the schools and participants were identified by the pseudonyms of Mapleville Middle School, Collaborative Middle School, and PLC Middle School. According to the most recent 2016-2017 school report cards, the demographics for each school are as follows: Mapleville Middle School’s student population is 69% Black, 25% Hispanic, 3% White, and 3% Asian; Collaborative Middle School is 62% Black, 32% Hispanic, 2% White, and 4% Asian; PLC Middle School is 77% Black, 21% Hispanic, 1% White, and 1% Asian. Additionally, 77% of teachers at
Mapleville Middle School, 68% of teachers at Collaborative Middle School, and 86% of teachers at PLC Middle School have been teaching for 3 or more years.

**Research Participants**

This multiple case study included staff from three urban middle schools who have been involved in a PLC for a minimum of 1 year. There were 22 participants. The data from this study were gathered through semi-structured interviews, and the Professional Learning Communities Assessment -Revised (PLCA-R) survey from Olivier and Hipp (2010). Participants of the study included administrators, teachers, guidance counselors, and paraprofessionals. Teachers participated in the interviews and completed the PLCA-R questionnaire. Paraprofessionals completed the questionnaire and assistant principals completed the PLCA-R questionnaire and participated in the interviewing process.

**Research participant school selection.** The three schools were purposefully selected for participation in the study because of staff members’ regular participation in the Professional Learning Community model. The three study locations were rated either proficient or well-developed on the New York City Department of Education (NYCDOE) 2016-2017 annual quality review. The reviews were conducted by an experienced educator over a period of 2 days. During this process, the reviewer assessed areas including teacher teams and leadership development. Table 3.1 presents information about each respective school’s rating on the quality review as it pertained to teacher collaboration and school culture. To gain access to the study’s population, the researcher contacted the superintendents of three districts. After receiving permission from the superintendent, the researcher emailed three building principals to request permission to recruit potential participants. Once these principals agreed to participate, an additional
email was sent to them for the purpose of informing potential participants about the 
study. The principals then sent a mass email to all eligible staff members. This group 
included assistant principals, teachers, and paraprofessionals. Prospective participants 
subsequently responded to the researcher via email to confirm their willingness to 
participate.

Table 3.1

**Study Locations’ 2016-2017 Quality Review Results**

<table>
<thead>
<tr>
<th>Locations</th>
<th>Teacher Collaboration</th>
<th>Curriculum</th>
<th>Student Achievement /Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapleville Middle School</td>
<td>Proficient</td>
<td>Proficient</td>
<td>Well-developed</td>
</tr>
<tr>
<td>Collaborative Middle School</td>
<td>Proficient</td>
<td>Well-developed</td>
<td>Well-developed</td>
</tr>
<tr>
<td>PLC Middle School</td>
<td>Well-developed</td>
<td>Proficient</td>
<td>Well-developed</td>
</tr>
</tbody>
</table>

*Note.* The source is New York City Department of Education’s 2016-2017 School 
Quality Review Data (NYCDOE, 2017).

The study participants were as follows: Mapleville Middle School – three 
teachers, two assistant principals, two paraprofessionals, and the principal; Collaborative 
Middle School – three teachers, two paraprofessionals, two assistant principals, and the 
principal; PLC Middle School – three teachers, one assistant principal, one 
paraprofessional, and the principal. The teachers in these settings participated in weekly 
PLC meetings to engage in activities including establishing criteria for grading student 
work, planning lessons, selecting appropriate materials, and developing common 
assessments (Pirtle & Tobia, 2014). The selected teachers were from different grade
levels and departments. The purpose of this study was to examine the perceptions of how effective PLCs were in impacting classroom instruction, student achievement, and school culture in public middle school settings from the viewpoint of faculty, administrators, and staff. Inclusion of varied staff members allowed the researcher to compile data from multiple perspectives which added depth to the study.

Figure 3.1

![Professional Learning Community Organizer](image)

**Figure 3.1.** Professional Learning Community Organizer. Reprinted with permission from “Professional learning communities in the USA: Demystifying, creating, and
The NYCDOE utilizes a rubric that allows each school’s quality assessor to rank schools in several categories. One of these categories is based on teacher collaboration, student achievement, and expectations. The ratings of proficient and well-developed are established by the criteria in the quality review rubric. A school that is rated well-developed is one in which:

- The vast majority of teachers are engaged in inquiry-based, structured professional collaborations that have strengthened teacher instructional capacity and promoted the implementation of the Common Core Learning Standards (including the instructional shifts), resulting in school-wide instructional coherence and increased student achievement for all learners.
- Teacher teams systematically analyze key elements of teacher work including classroom practice, assessment data, and work for students they share or on whom they are focused, resulting in shared improvements in teacher practice and mastery of goals for groups of students.
- Distributed leadership structures are embedded so that there is effective teacher leadership and teachers play an integral role in key decisions that affect student learning across the school.

A school that is given a rating of proficient meets the following criteria:

- The majority of teachers are engaged in structured, inquiry-based professional collaborations that promote the achievement of school goals and the implementation of Common Core Learning Standards (including the instructional shifts), strengthening the instructional capacity of teachers.
• Teacher teams consistently analyze assessment data and student work for students they share or on whom they are focused, typically resulting in improved teacher practice and progress toward goals for groups of students.

• Distributed leadership structures are in place so that teachers have built leadership capacity and have a voice in key decisions that affect student learning across the school.

**Instruments Used in Data Collection and Analysis**

This case study utilized semi-structured one-on-one interviews and the Professional Learning Community Assessment questionnaire. These are two of the primary collection strategies suggested by Creswell (2007). Interviews and questionnaires provide several forms of data as opposed to a single source (Creswell, 2007). These features are the rationale for conducting qualitative research, which provides depth and detail about human experiences and behavior and how it is influenced by the setting in which it occurs. An interview protocol was used to collect data that answered the research questions. Semi-structured interviews allowed the researcher to pose open-ended questions, which allowed for a discussion with participants rather than a strictly question/answer format (Glesne, 2011; Lodico et al., 2010). Interviews were conducted to provide the researcher with a deeper understanding of the perceptions of principals, teachers, assistant principals, and paraprofessionals; this method allowed participants to openly provide their opinions (Jamshed, 2014). Similarly, Meffe, Moravac, and Espin (2012) posited that semi-structured interviews allow participants to describe their experiences, while simultaneously sustaining a similar focus amongst each of the interviews. The semi-structured interviews and the PLCA-R questionnaire were utilized
jointly to answer the four overarching research questions. The Professional Learning Community Assessment questionnaire solicited responses from participants at each of the three study sites in relation to six domains that Huffman and Hipp (2010) identified as significant to high-quality PLCs. Respondents indicated their level of agreement with 52 total statements across these six areas. Likewise, the semi-structured interviews allowed participants to express their views about their experiences as members of their school’s learning community. The data from these instruments served to answer the research questions in relation to the following aspects of each school site: school culture, pedagogy and the academic environment, strengths and weaknesses of the PLC framework, and student achievement. The data served to provide insight into the extent to which the learning community impacted each of these components. Furthermore, the data was analyzed using literature related to the PLC.

**Procedures for Data Collection and Analysis**

A request was made for permission to use the Professional Learning Communities Questionnaire instrument (Appendix A). The researcher received permission to use the PLCA-R instrument prior to beginning the study (Appendix B). The Professional Learning Community Assessment-Revised (PLCA-R) questionnaire (Appendix C) was another data collection method that was utilized. This questionnaire was administered to teachers, assistant principals, and paraprofessionals, to measure staff perceptions of school practices related to PLCs. The PLAC-R questionnaire is comprised of questions in each of the following dimensions: shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions – relationships, and supportive conditions – structures. The questionnaire
served as a catalyst for fostering communication between the researcher and the participants. The questionnaire inspired dialogue related to the current state of PLCs in each research setting.

Interviews (Appendix D) were conducted to gain greater insight into the perceptions of teachers; these interviews also allowed respondents to voice their opinions and to expand upon and explain in greater detail their responses on the questionnaire. The PLCA-R questionnaire is focused on the structures that are in place and to what extent the professional learning community design impacts school practices. On the other hand, the interviews focused more on the impact of the PLC on classroom decisions, teacher learning and professional growth, and suggestions for improvement of the current PLC model. The interview questions are indicated in Appendix E. New York City Department of Education Institutional Review Board approval is indicated in Appendix F.

This researcher was able to use the one-on-one individual interviews to gather more in-depth feedback using probing questions. Interview transcripts were read and recoded several times. This allowed the researcher to focus on the most salient aspects of the data. Open coding was used to chunk data and tentative labels were assigned based on the researcher’s observations. Through the analysis of the transcripts, several categories and themes were revealed. Axial coding was then employed to gather similar codes together to form categories to highlight the connections between the codes. Finally, selective codes were created. To do this, the researcher connected and categorized the axial codes based on the data that was gathered throughout the interview process. The
interviewees provided a great amount of information. As such, the most common and prominent ideas were chosen for inclusion in this study.

Once the researcher completed the coding of the data at each location, intra-coder reliability was employed to ensure validity of the transcripts that the researcher coded. The researcher’s coded transcripts were examined by an additional reader for consistency and appropriateness as it related to the typed interview documents. The researcher’s peer validated the coding of the interviews. By rereading the existing transcripts and establishing codes, the second coder ensured that the codes that were identified were the same or similar to the researcher’s established codes. The researcher’s peer holds a master’s degree and an Ed.D. in Executive Leadership. This yielded insight regarding how the data aligned with the research questions that anchored this study.

Data analysis for this multiple case study included continuous analysis of each case separately and a cross-analysis of the three schools was conducted. At this point, the previous stages were analyzed to ensure that the assigned themes matched the data that were initially collected and coded. Emergent themes for each case were evaluated to form broad concepts to synthesize the data amongst each site. To cross-analyze the data, it was necessary to merge and create categories that were consistent across all three cases. A matrix was utilized to display the final themes. The data for each theme based on each case is displayed with this organizational structure. An overall portrait of each case was created.

Lincoln and Guba (1985), in their seminal work, asserted that trustworthiness is significant in a research study for evaluating its worth. According to Cohen and Crabtree (2008), “triangulation involves using multiple data sources in an investigation to produce
“understanding” and account that is “rich, robust, comprehensive, and well-developed” (para. 1). The primary data sources that were employed in this study were semi-structured interviews, observations, and questionnaires. Semi-structured interviews were completed in mutually agreed upon locations while questionnaires were administered in person. The multiple sources of data strengthen the trustworthiness of the study.

Merriam (2007) propounds that educational studies should be rigorous, and that insights and findings of the studies should be of importance to other educators, readers, and researchers. Additionally, Gall, Borg, and Gall (1995), posed the following questions to determine if trustworthiness exists: (a) Do the findings capture what is there? and (b) Is the research credible? Gall et al. (1995) maintained that an affirmative response to these questions can only be given if the researcher in the study provides enough information and description to show that the researcher’s conclusions are valid.

Furthermore, Eisner (2017), postulated that corroborative evidence from multiple sources breeds credibility and produces a sense of confidence in the researcher. The recommendations of these researchers were used, and as such, qualitative data was collected from three sources: interviews, observations, and a questionnaire. The multiple case study allows for greater insight into professional learning communities. To solidify this point, Cochran-Smith and Lytle (1999) wrote, “Understanding one classroom helps us to better understand all classrooms” (p. 6). The questionnaire research instrument was used to detect and categorize themes that are consistent within the three schools that were studied.

**Interview protocol.** The individual interview was used to discover, understand, and gain insight. (Merriam, 2009). Each interview was conducted with the three school
locations and were 1 hour in length. A total of 22 teachers, administrators, and paraprofessionals were interviewed to understand the effectiveness of PLCs and to learn more about what cannot be directly observed. Individual interviews were conducted at each study location. Three teachers, two assistant principals, and the principal were interviewed at each study site. Hatch (2002) stated,

Data analysis is a systematic search for meaning. It is a way to process qualitative data so that what has been learned can be communicated to others. Analysis means organizing and interrogating data in ways that allow researchers to see patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, or generate theories. (p. 148)

To facilitate this process during the semi-structured one-on-one interview, digital recording equipment was used to document participant responses. Participants were asked a demographic question. They were then asked nine questions related to the following characteristics of PLCs as it relates to their schools: shared vision and mission, collective inquiry, collaborative teams, action orientation and experimentation, and results orientation (Appendix B). Each participant was interviewed individually. The researcher then listened to the audio recordings and transcribed each interview. The researcher briefly read through the transcripts as a whole. Notes were written based on the researcher’s initial impressions. Individual transcripts were then carefully reread. The researcher then labeled relevant words, phrases, and sections. The researcher identified important concepts based on the repetition of ideas and participants’ acknowledgement that a specific thought was significant. Interview data were analyzed to gain insight into teachers’ perceptions of the effectiveness of the PLC model that was implemented at each
of the three case study locations. The data that were generated were coded and organized into emerging themes. All interview questions resulted from the research questions.

Once the interviews were transcribed, the researcher organized and methodically reviewed the data using Microsoft Word. Comments/responses were removed and organized into Microsoft Excel to start the coding process. This process involved reading notes numerous times and subsequently classifying and placing data into recurring codes and themes. The researcher employed the following steps to code open-ended questions: (a) create logical categories and produce a coding recording sheet, (b) code each response categorically, (c) create data tables to record results for each question, and (d) write a description of the findings (Griffin, 2005). Furthermore, a narrative of findings was organized by individual research questions.

**Questionnaire.** The Professional Learning Community Assessment Revised (PLAC-R) created by Olivier and Hipp (2010) was administered to all participants to evaluate the effectiveness and implementation of PLCs. The PLAC-R questionnaire is used to measure participants' perceptions of their school’s implementation and engagement in six dimensions. The dimensions that were assessed are: (a) shared and supportive leadership, (b) shared values and vision, (c) collective learning and application, (d) shared personal practice, (e) supportive conditions related to relationships, and (f) supportive conditions related to structure.

The survey is comprised of 52 statements, and for each one participants could respond by indicating that they strongly disagree, disagree, strongly agree, or agree. The original Professional Learning Community Assessment (PLCA) was created to examine classroom and school-level professional learning community practices (Olivier, Hipp, &
Huffman, 2003). Additional research by Olivier et al. (2003) suggested that a significant component was missing from the PLCA questionnaire; using research from Hord and Hirsh (2008), which states that the process of collecting, analyzing, and employing data to inform efforts to improve PLCs, is vitally important, Olivier et al. (2003) revised the initial instrument. The 45 original questions were combined with seven additional ones. Before incorporating the new questions, an expert panel comprised of educators, administrators, district and regional support personnel, college professors, educational consultants, and doctoral students conducting research on PLCs was launched. An expert opinion questionnaire was designed, and participants were selected to rate statements related to how relevant each was with regard to the professional learning community framework. The feedback indicated that each of the questions was relevant to assessing the effectiveness of the PLC model and all seven questions were added to the new PLCA-R instrument (Olivier & Hipp, 2010). Olivier et al. (2009) conducted validity analyses of the PLCA-R instrument. The data indicated that the Professional Learning Community Assessment Revised is a valid instrument. The researchers employed a specific process for validating and assessing reliability.

A pilot study was conducted by Appalachia Educational Laboratory (AEL) staff to assess the validity of the questionnaire (Meehan, Orletsky, & Sattes, 1997). These researchers evaluated the internal consistency and stability of the questionnaire to gauge its reliability. The Cronbach's alpha for the instrument was deemed to be 0.92. The internal stability was assessed through a test, retest method and was found to be 0.94. Three measures of validity were tested: content validity, concurrent validity, and construct validity. To determine content validity, research on professional learning
communities was examined and independent AEL researchers analyzed each question. To explore concurrent validity, a survey containing similar items was studied and the correlation between the instruments was 0.74. Finally, construct validity, to determine if the instrument measured what it was created to measure, was determined through a known-group methodology and factor analysis. A $t$-test was also employed to ascertain if there was a significant difference in the scores of the known-group and the field test participants. The widespread use of the instrument provided an opportunity to review the dimensions for internal consistency. The most recent analyses of this diagnostic tool have confirmed internal consistency resulting in the following Cronbach’s alpha reliability coefficients for factored subscales ($n=1209$):

- Shared and Supportive Leadership (.94)
- Shared Values and Vision (.92)
- Collective Learning and Application (.91)
- Shared Personal Practice (.87)
- Supportive Conditions-Relationships (.82)
- Supportive Conditions-Structures (.88)
- One-factor solution (.97)

The questionnaire aided this researcher as a diagnostic tool in identifying effective practices in each school setting that increases professional learning and growth and creates a strong pedagogical and academic climate. The selected questions were related to specific policies and procedures in the following categories: shared values and vision, collective learning and application, shared personal practice, and shared and supportive leadership. This instrument served as the catalyst for face-to-face discourse.
The questionnaire was used to garner data that answered the research questions and promoted dialogue that yielded information related to the PLC environment. The data from the questionnaire were examined to identify trends. Responses were analyzed and sorted. Each questionnaire was assigned a unique identification number. Excel was used to design a data entry sheet. Columns were inserted and each question and its corresponding number in the survey were typed, one per column. For example, Q1, Q2, and Q3 were used to identify each of the 52 questions. Respondents’ unique identifier number were entered, one per row. The item numbers across the top of the survey were ordered as the item appeared on the questionnaire. Each possible questionnaire response was assigned a unique code as follows: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. Prior to beginning data collection, a priori codes were established. These initial codes were derived from the research questions. Once reading and analysis of the data commenced, emergent codes were developed from the raw data. Once this was completed, the codes were refined. Coding categories were collapsed, expanded, and revised. The researcher wrote down notes related to reactions that emerged.

Data analysis for this multiple case study included constant analysis of each of the cases separately, followed by a cross analysis of the three study schools as a unit (Stake, 2013). Additionally, a search for pattern consistency revolving around specific conditions within each of the study sites was undertaken. The researcher compared the data from the observations, questionnaire, and interviews and compared codes of events, actions, and words within the transcripts of each case study location. This analysis allowed the researcher to find the similarities and differences and acquire new insights.
Common concepts and themes were identified, and a matrix was developed to highlight recurring themes within the three schools.

**Chapter Summary**

This chapter described the research design, the population, instruments, and analysis that was used in this study. Participants’ perceptions were analyzed to determine if PLCs increase teachers’ learning and collaboration, professional growth, and instructional capabilities. Chapter 4 will present the data collected in the research and the findings from the study.
Chapter 4: Results

This multiple case study examined the perceptions of school staff related to the impact of the professional learning community model. The researcher employed a qualitative research design because of the desire to gain in-depth perspectives of the school staff within this particular framework. The qualitative multiple case study approach allowed the researcher to utilize semi-structured interviews and a questionnaire to gather detailed descriptions of individuals’ experiences, attitudes, and beliefs. Chapter 4 is organized by the individual research questions and the findings that unfolded from the interviews and questionnaires. In this multiple case study, the researcher examined three collaborative settings to identify the principals’ and staff’s beliefs, practices, values, and conditions that contributed to both the effective workings along with the unfavorable aspects of the PLC framework utilized at each study location. The schools were all middle schools that were a part of the New York City Department of Education. The following research questions guided the study:

Research Questions

1. What aspects of school culture are impacted by the use of PLCs?
2. How do PLCs affect classroom pedagogy and the academic environment?

3. What are the strengths and weaknesses of the implementation of the PLC as perceived by the instructional staff?

4. Do school personnel perceive that collaboration within the PLC affects student achievement?

The research participants for this study were teachers, assistant principals, paraprofessionals, and principals who were employed in New York City public schools that utilized the PLC framework for teacher collaboration. This chapter reports the findings from data collected through one-on-one interviews and questionnaires at three study locations: Mapleville Middle School, Collaborative Middle School, and PLC Middle School. Teachers at each site were interviewed and completed the questionnaires; paraprofessionals completed the questionnaires only, and the principals were interviewed.

Data Analysis and Findings

Interviews. The following is a breakdown of the 17 interview participant total at the three study sites: Mapleville - three teachers, two assistant principals, and the principal participated; Collaborative – three teachers, two assistant principals, and the principal; PLC – three teachers, one assistant principal, and the principal were interviewed. The duration of the interviews was between 30 and 45 minutes. The researcher created 10 overarching questions that pertained to the ideas that were central to the research questions. These questions allowed the researcher to seek clarification and allowed participants to elaborate on vague responses. The researcher was able to rechannel participants’ replies to the interview questions that were posed. The initial
A question was posed to solicit information about participants’ PLC experiences. A few of the questions were similar in nature to allow for participants to think and speak critically about their principles, beliefs, and attitudes. The questions progressed from individual experiences with the PLC model, to the experiences related to the team’s functioning, and then gradually centered on the school’s culture and structure pertaining to the model’s current state of operation. Table 4.1 provides the questions and the corresponding research questions with which they aligned.

Table 4.1

*Table Questions Aligned to Research Questions*

<table>
<thead>
<tr>
<th>Interview Question</th>
<th>Corresponding Research Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tell me about your experiences with PLCs. (Question to ensure study eligibility).</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>2. How do team members transfer their learning from the PLC into the classroom? What evidence supports this?</td>
<td>1, 2</td>
</tr>
<tr>
<td>3. Do team members meet with each other independently of the team? Is this encouraged?</td>
<td>1, 4</td>
</tr>
<tr>
<td>4. Describe ways in which you think that your school is oriented towards action and experimentation.</td>
<td>3</td>
</tr>
<tr>
<td>5. Describe ways in which your school is oriented towards results.</td>
<td>3</td>
</tr>
<tr>
<td>6. How does your team strive for continuous improvement?</td>
<td>3</td>
</tr>
</tbody>
</table>
7. What structures do you believe support collective learning?

8. What PLC practices do you believe have been most beneficial? Least beneficial?

9. How does the team support new members?

10. Do teachers work together to examine student work? Please explain.

---

**Professional learning community – revised questionnaire.** To examine the extent to which each site operated as a PLC, participants were invited to complete the PLCA – R questionnaire. The PLCA - R utilizes a 4-point scale that assesses the six chief components of the PLC. The 52 questions are divided into the following categories:

1. Items 1-11 are focused on the PLC characteristics related to Shared and Supportive Leadership
2. Items 12-20 assess Shared Values and Vision
3. Items 21-30 highlight participants’ perceptions of Collective Learning and Application
4. Items 31-37 relate to Shared Personal Practice
5. Items 38-42 pertain to the area of Supportive Conditions – Relationships
6. Items 43-52 require participants to assess Supportive Conditions – Structures

The following participants completed the PLCA – R questionnaire at each study location: Mapleville – three teachers, two assistant principals, and two paraprofessionals; Collaborative – three teachers, two assistant principals, two paraprofessionals; PLC – three teachers, one assistant principal, and one paraprofessional. The same teachers and
assistant principals who participated in the interviews also participated in the completion of the questionnaire.

The researcher also utilized a prior study (Hill, 2007) to assess the degree to which each site was operating as a PLC in each of the six PLCA components. This was done by calculating the overall percentages for positive responses – those in the strongly agree or agree range. The stages were as follows: non-demonstration – 0-44%, initiation stage – 45-64%, implementation stage – 65-84%, institutionalization stage – 85-100% (Hill, 2007). Figure 3.1 details the various levels that exist within professional learning communities. Schools may operate at varying levels. This is dependent upon the dimension that is being examined. The non-demonstration stage, while not explicitly outlined in the figure, indicates that a specific dimension is not observable at a particular site. The initiation stage relates to schools that are currently laying the groundwork for one or more of the dimensions. This stage accounts for schools that are in the beginning stages of PLC development. Activities at this stage include; a review of the school’s current state, analyzing current resources to better understand how they can be leveraged in the improvement efforts, and mapping out benchmarks and indicators to assess progress. The third stage, implementation, is marked by a general understanding of staff members of the purpose of the learning community and the priorities of the school. At this stage, PLC participants sometimes do not fully embrace the changes that are being incorporated in the school community. The final stage, institutionalization, is the level at which practices and innovative undertakings become routine and embedded in the school’s everyday culture. At this stage, most of the major issues that were experienced
in the beginning stages have often been eliminated, including challenges related to time and adequate use of resources.

This chapter reports the findings from data collected through semi-structured interviews and the Professional Learning Community Assessment questionnaire at three sites: Mapleville Middle School (MMS), Collaborative Middle School (CMS), and PLC Middle School (PLCMS); the findings will be presented in that order.

Mapleville Middle School

This study location is a middle school serving 880 students in the sixth through eighth grades. The student body is comprised of the following demographic groups: Blacks (69%), Hispanics (25%), Whites (3%), and Asians (3%). Seventeen percent of the students were enrolled in special education classes while 2% of the students were identified as English language learners. The teaching staff was mostly comprised of veteran teachers as was evidenced by the fact that 77% of the educators had 3 or more years’ experience.

The data collection process included interviews with three teachers, two assistant principals, and the principal; questionnaires were administered to three teachers, two assistant principals, and two paraprofessionals.

Research participants – Mapleville. The interview participants from Mapleville were as follows:

- Participant 1: 16 years of teaching experience (middle school - math), master’s degree.
- Participant 2: 3 years of teaching experience (middle school and high school – ELA), master’s degree.
• Participant 3: 11 years of teaching experience (middle school – Spanish), master’s degree.

• Participant 4: 13 years of teaching experience (middle school – ELA); master’s degree.

• Participant 5: 18 years of teaching experience (middle school – social studies), master’s degree.

• Participant 6: 20 years teaching experience (middle school – math), master’s degree.

Interviews were conducted to obtain information and generate examples of professional learning community practices that impact teaching and learning, school culture, and collaboration. The data was subsequently analyzed to reveal common patterns and themes that shed light on the broader research questions.

Research question 1. What are the perceptions of school staff regarding the impact of PLCs on their learning and effective teaching practices? The purpose of this interview question was to assess participants’ perceptions of the how the PLC structures had impacted them. These personal reflections were perceived by staff members as positive or negative and provide insight into the functioning of the framework at Mapleville Middle School. Based on interviewees’ responses, four categories were revealed: teacher collaboration, teacher support, culture, and administrator support. This resulted in the theme of collegial relationships, as highlighted in Table 4.2.

Table 4.2

<table>
<thead>
<tr>
<th>Codes/Categories/ Themes Research Question 1 - Mapleville</th>
</tr>
</thead>
</table>

77
1. willing to help, feedback, meet together, improve structures, professional development

2. sharing, partnerships, intimacy, culture of collaboration, grade together, bounce ideas off others, building a team

3. intervisitations, solid relationships, meetings benefit teaching experience, trust in team, shared values, continuous learning, respect

4. encourages meetings, principal incorporates suggestions, seeks feedback from staff, afforded the opportunity to try new things

---

**Collegial relationships.** Collaboration and collegiality are integral components of PLCs. Collegiality involves colleagues with a common purpose working cooperatively to maximize teacher learning and professional growth. Professional Learning Communities eradicate teacher isolation and seclusion. The benefits include improvement in instructional strategies, increased student achievement, and the exchange of ideas. Professional Learning Communities that are effective produce positive change and relationships are strengthened when colleagues come together to reflect on their practice.

**Teacher support.** Participants posited that the PLC framework at MMS resulted in a supportive atmosphere and aided in their instructional capability. P1 stated, “I find the meetings helpful. We discuss the standards and what students need to know, and then we go back and teach the required content.” Several participants also believed that the PLC was advantageous when teachers were able to observe best practices and then implement them within their own classrooms. P4 acknowledged:

When we have PLC meetings, a transfer of learning happens many times. Proof of that is teachers sampling models or artifacts from the PLCs that they have viewed, and then trying it in their own classrooms. For example, they have done
intervisitations and have seen parallel teaching and stations and they then go back to their own classrooms and incorporate these ideas. Getting assistance from others is truly helpful.

P5 agreed with this assertion: “The teachers are open and invite best practices that are successful, and they seek those out.” Moreover, P6 stated:

Someone may have a better way of teaching slope that is easier than the examples from the book that the kids really understand it. They might tell the others, check out this or I did that, and the students really understood it when I showed them a specific video or model.

On the other hand, some participants did not feel that the Professional Learning model always provided support that was beneficial to teachers. P2 believed that the degree to which support was extended to pedagogues depended on the type of PLC that was being held during a given week. P2 contended:

I will say that in regard to my team, we have a good team. I think that we work well collaboratively. We are a mixed team because I teach special education, classes, another teaches honors classes. There is an ICT person. We support one another and exchange ideas. However, when we get together as a whole department, everybody’s sort of arguing and not agreeing with certain things. There is a lot of disagreement.

Similarly, P3 emphasized a lack of consistent support and stated, “We sometimes do lessons and then we don’t revisit it, so this doesn’t really strengthen or help us.”

**Teacher collaboration.** The category of collaboration was derived from participants’ responses to interview questions 1, 2, and 3. All of the participants identified
collaboration as a core tenet of Professional Learning Communities. This was evident from P3’s experiences. “We work together as a team to make sure that we can get our job done; we grade student work as a team. We work on improving the curriculum and strengthening our lessons.” P1 agreed with this statement, and expressed, “If there is something that I do not know, my colleagues are willing to help.” Furthermore, collaboration was touted as an aspect of the PLC that is valued and strongly encouraged by the faculty at Mapleville. According to P6:

Collaboration is encouraged. The administration wants the teaching staff to get together even outside of the regular PLC time to meet, share, and discuss. This human resource dynamic helps teachers to create common assessments, ask questions, and share resources. The teachers also look at the curriculum to make sure that they are planning the same way.

P4 agreed with this thought and asserted that, “Teachers work together, which allows them to regularly share and bounce ideas off of one another.” P5, on the contrary did not feel that this practice of regularly sharing ideas with other teachers occurred all of the time. In fact, P5 affirmed,

I believe that meeting with other members of the team is encouraged, but I think that it is seasonal. There are times when it is at full speed, and then there are instances when there is a slow down in collaboration.
**Culture.** An additional category derived from the interview process was culture. Culture is defined as a set of norms, values, beliefs, rituals, relationships, and attitudes that shape a group’s or a school’s persona. P5 described the PLC process before structured learning communities were implemented.

People worked separately. There was no cohesion. There was very little exchange of ideas and no clear expectations were set for students. Every teacher did something different and the collaborative environment was really nonexistent. When we have a chance to be a part of such a process, I have experienced the benefits.

The school culture is clear and is evident of solid relationships that exist amongst the teachers. Staff members are invested in ensuring that the environment is one that is non-toxic and collegial and allows the team to function effectively. P6 stated, “Strong relationships are truly beneficial. Everyone knows that they are important to the team. When the teachers share, trust is strengthened, and colleagues are not afraid to rely on one another and are willing to take risks.”

A shared culture of respect amongst peers also marks the Professional Learning Community at Mapleville. P1 indicated:

We know that everyone has talents and skills that assist the team in meeting its goals and successfully impacting the school and the PLC. I think that we can go to any teacher in the building and ask for help or ideas and no one will refuse to help. If there are problems, we work together to solve them.

Several participants discussed a culture of success that exists at MMS. The staff wants to improve and there was a desire to effect positive change in student achievement.
P3 mentioned, “We want all kids to be successful, not necessarily having a 90 average, but being able to show growth based on where they are.” P2 concurred and asserted:

We don’t just focus on one group of students. Every student group is looked at. We want to help increase success for the ones who are really struggling, those in the middle, and students who are high-performing. The staff wants students to feel successful and to continue to work hard. As the year goes on, we want all of the students to show growth on the benchmark and baseline assessments.

P4 contended that the educators tried to find creative ways to meet the needs of different students’ learning styles. Some participants indicated that there is a culture of responsiveness to student needs and challenges. Teachers, they contend, work to ensure that the strategies that are implemented truly address the areas of weakness. P4 expressed:

I will give the math example of Plickers. I think that it is beneficial and shows that teachers want immediate data that can be used to drive their instruction. The Socratic Seminar is another type of instructional tool that allows students to monitor their own learning and increase their success in having dialogue with their peers.

**Administrator support.** In alignment with research question 1, several participants spoke about varied aspects of administrator support and its impact on the Professional Learning Community, teacher practice, teacher morale, and relationships throughout MMS. P6 described the principal as a leader who had been supportive in allowing teachers the opportunity to be risk takers while trying out new classroom initiatives. Additionally, P6 revealed that the school leader was willing to allow staff to
attend off-site professional development activities that benefits their instructional practice and is comfortable bringing in brand new resources and strategies. P6 divulged:

I think that the principal has afforded staff members the opportunity to try new things. He is more apt to give people the opportunity to do something new, to go places. Money does not seem to be a massive issue. If money is not an issue, he is able to say, I can send you to conferences. He likes to bring new things into the building, so in that respect, he is very action-oriented.

P3 on the other hand believes that the administration seems open to new ideas, but this is not truly the reality at MMS. P3 expressed, “Let me say this, I think that the administration is open to hearing new ideas, but once you try to pose something new, it gets shot down.” P4 noted that the administration aids pedagogues and pedagogy through its willingness to experiment and incorporate new ideas that can strengthen teaching and learning. The administration, P4 implied, discontinues programs that are not beneficial, P4 said:

We are leaning toward experimentation under the new administration. There have been different programs brought in, different incentives, and different tools, whether they are technological tools or programs, book-based programs, or school-based programs. Last year, we did Myon, and the majority of teachers said that they did not like it. Therefore, it was not purchased again this year. If there is a system that is not good, then it is eliminated. This demonstrates that the principal wants to listen to teachers so that support can be given. I know that the math department is using a Pearson online tool; this is on a trial basis this year.
Similarly, according to P2, “Plickers is used by a lot of teachers. The administration brought this in as a way to assist teachers in bettering student achievement and a means to gather data about how students are doing.” On the contrary, P2 indicated that the administration tries to support teachers, but does not always welcome and utilize staff suggestions. P2 stated, “I will say that being more creative and thinking outside of the box is an issue because in literacy, for example, there are units, and teachers have to use the same lessons. There is little room for originality. I will say that there is a lack of support for ideas that the staff supports.”

**Research question 2.** Data was collected to answer research question 2. How do PLCs affect classroom pedagogy and the academic environment? Three themes emerged from the interviews related to participants’ perceptions of the impact that Professional Learning Community involvement has on instructional practice and the academic climate. These categories were focus on learning, data driven decision-making, and intervisitations. The overall theme from that was developed was results-orientation. The codes and themes are reviewed in Table 4.3.

Table 4.3

<table>
<thead>
<tr>
<th>Codes/Categories/Themes Research Question 2 - Mapleville</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codes</td>
</tr>
</tbody>
</table>

1. Emphasis on student learning, student growth, student challenges, student test scores, student performance, student levels of achievement, student improvement

2. Evidence – based decisions, look at data, data drives instruction, compare data, data to improve the PLC, revamping curriculum, deep data dives, comparison of data across classrooms

3. Visit peer classrooms, watch other teachers, positive and negative lesson feedback to host teacher, learning from visiting peers

---

**Focus on student learning.** Educators in professional learning communities regularly assess their progress and effectiveness based on tangible evidence. The teachers engaged in PLCs use the evidence and data that is produced to improve and solidify their practice. The PLC model is a model that is firmly rooted in the core mission of ensuring that students receive quality instruction and that their learning is a significant focus of the efforts put forth by participants. Student outcomes and professional learning are tantamount in achieving results and driving continuous improvement.
In spite of differences in teaching assignment, grade level that teachers taught, and length of time participating in PLCs, the participants noted that the PLC allowed for teachers to place a stronger emphasis on student learning. P5 expressed:

I think that very often, we as educators, benefit from the PLC because looking at overall student growth and what actions need to be done around that allows for teachers to figure out where students are and what needs to be done to move them forward.

P2, on the other hand, maintained that the PLC does place a stronger focus on learning for both teacher and student, but P2 indicated that sometimes, “The learning community meetings allow for us as educators to really hone in on our students and their achievement and success. We get the chance to make our own teaching stronger by looking at areas that need improvement.” P6 stated:

Everything that we do at this point, departmentally, is data-driven. Student test scores are analyzed. Then, the teachers decide what they are going to work on and modify curriculum to meet the needs of both students who get the concept and those who do not. It is important for pedagogues to use the creative strategies during the PLC meeting time to hone in on the students’ performance and levels of achievement.

P1 articulated the importance of engaging in collaborative activities. This participant discussed the impact that this practice has on the student population. P1 noted:

When we come together by grade, we can see which kids are struggling, what concepts they are struggling with, and then we can work to correct it. For
example, we use technology such as Plickers to engage students and keep them involved.

P3 agreed and stated, “Pooling resources, such as videos and other activities definitely is beneficial for diverse learners.” Participants revealed that student and teacher-focused learning are equally important in creating a successful learning community. The learning is impactful for students and teachers alike. P4 disclosed, “This PLC is a means for learning for everyone alike. Additionally, P4 expounded on the importance of receiving professional development that allows for there to be in-service training opportunities that allow educators to bolster student learning. P4 confirmed:

When professional development sessions are offered that focus on student improvement, this is beneficial because I can see and hear about strategies that will help me to differentiate lessons and materials that allow students to succeed. These sessions make it important to find ways to help our students.

Data-driven decision-making. The opportunity to utilize data to make decisions at Mapleville Middle School has promoted a focused environment in which decisions are made based on tangible evidence and information. During the interviews, P5 vocalized:

One thing that the principal does is to look at data. Then, he and the leadership team break it down, and implement some form of action. He looks continuously at the observation reports, at the quality review reports, and at the principal’s performance recommendations. The principal tries to use the data to improve the PLC.

The atmosphere created by the PLC enables teachers to compare data from their respective classes and then to create new instructional strategies. Interview participant 4
avowed that when, “Data drives instruction, teachers get a clearer picture of what is happening in the classroom and this allows them to put systems into place to experiment and try new techniques geared towards student growth.” P3 shared that there are times when teachers in specific departments want to do certain things their own way rather than using the data to make the decisions for their classrooms. Teachers noted that collaboration around data was vital for revamping curriculum, instruction, and assessments on a regular basis. This was corroborated by P2, who reported, “Deep data dives are important. They are the basis for putting systems in place to improve student outcomes.” P4 added, “Comparison of data across classrooms and subject area provides important information not just academically, but to combat other problems such as attendance and classroom management.”

**Use of intervisitations.** Peer intervisitation is a teacher facilitated non-evaluative classroom visit. This framework provides a structure to support educators’ professional growth and progression. This practice provides shared understanding of best practices related to teaching and learning in an environment of mutual trust and respect. Several participants indicated that this form of mentoring has benefitted their own teaching expertise. P5 expressed that intervisitations have had a positive impact:

> Being able to go into other people’s classrooms to observe their teaching style has been helpful. I am able to see what other educators do and incorporate those things into my classroom that work. I enjoy the professional dialogue that happens because we can discuss what went well, what might need to be changed, and what we can use as a whole school practice.
The positive effects of intervisitations were also seen as a way to eliminate teaching in isolation. P3 stated that this practice causes teachers to work collaboratively:

When there is a group of people working together during the intervisitations, it creates an atmosphere of sharing. There are more ideas generated and we get to see things differently, rather than just doing everything on our own. I think that teaching in isolation creates a stagnant environment, but together there is a flow of ideas.

Further, P2 noted, “Intervisitations are great brainstorming sessions to exchange ideas together that one person may not have thought about alone.”

**Research question 3.** Data was collected to answer research question 3: What are the strengths and weaknesses of the implementation of a PLC as perceived by the instructional staff? This study allowed the researcher to uncover findings related to aspects of the professional learning community that are beneficial and detrimental to the functioning of the model at MMS. Table 4.4 highlights the three categories that emerged from the interviews. These were type of structure, type of meeting/group, and shared and supportive leadership. The interviews yielded one overarching theme related to the above research question. The theme that resulted was barriers and benefits of PLC implementation.

Table 4.4

*Codes/Categories/Themes Research Question 3 - Mapleville*
Barriers of PLC implementation. Several aspects of the organizational structure were identified as barriers to successful PLC functioning. The ideas that were connected to this overarching theme included time and structure, type of meeting/grouping, and shared and supportive leadership. These categories are addressed in relation to the one-on-one interviews that were conducted.

Time and structure. When asked about the weaknesses of the PLC framework at MMS, the most common responses centered around time and the structure of the learning community meetings. In fact, of the six participants, four of the interviewees noted that these areas were challenges to the functioning of the PLC. One reason provided by the
participants was that the time allotted within the current structure that was dedicated to PLC activities was insufficient. Some participants noted that despite the fact that Tuesdays were designated for PLC meetings, the time was not always properly divided to allow for these sessions to occur. For example, P4 commented that:

Sometimes there is not enough time. I think that this a result of some things dragging on for too long. Sticking to a schedule is a struggle too. I feel that there are times when a schedule is put out, and I will be very honest, the principal will come in and say that we are doing something else on that day.

Likewise, P1 believed that there in not enough time to complete everything that needs to be done during a given school year. According to P1, “There is not enough time sometimes. The 10 months to get everything done such as assessments, lesson plans, and intervisitations is very challenging.” Conversely, P6 expressed the difficulty that the mathematics team experienced in relation to revisiting curriculum, redeveloping tasks, as well as selecting tasks that were appropriate for students of varying levels. While P6 focused on the difficulties that the staff had with modifying curriculum and student tasks, P5 and P3 readily provided ideas for improving the use of PLC time; their suggestions included early dismissal for students on Fridays to enable teachers to meet, having a delayed opening once per week, or meeting twice per week rather than once per week.

Additionally, P2 expressed that the lack of adequate time was “significant,” and this participant noted that this issue took away from the ability to impact student learning and teacher improvement because the meeting time, “was not always consistent and effective.” Furthermore, P2 noted that the impact on student performance “varied from
classroom to classroom because the direction that teachers are to go in is not always clear.”

**Type of meeting/grouping.** Several respondents indicated that the type of meeting impacted the effectiveness of the PLC sessions. For example, interviewees posited that grade level meetings were much more productive and focused as compared to meetings across grade levels and subject areas. P2 asserted, “When we break off into grade team meetings, this is beneficial, but when it’s the entire team together, nothing really gets done.” P3 remarked:

> Working with teachers who teach the same material as I do is very beneficial. We can discuss our lessons and what worked and what did not work. We get a lot done because the focus is the same. When the meeting is mixed, there are too many things happening, and it is difficult to see the purpose in this structure. I feel that sticking to the same department and grade level gives teachers a chance to really look at what is happening across similar classrooms so that they can improve instruction and practices.

P3 also felt that the grade level grouping was advantageous in that, “We are able to look at common student populations across classrooms, and by coming together by grade, I think that we are able to see results when we work to identify and correct the difficulties.” Participants also articulated the importance of working with teachers of other subject areas who taught the same student groups that they do. P2 commented, “Looking at the whole child is also important, so pairing up with other teachers who share my students is very helpful. This happens only in a few classrooms, but it is not a
widely utilized practice.” P5 remarked that, “Some teachers do go to teachers of other subjects to seek ideas and collectively pool resources.”

**Practices that benefit PLC implementation.** During the interviews, respondents indicated that the practice of acclimating new members to the PLC was very valuable. This allows new team members who are unfamiliar with Mapleville’s learning community to gain a solid understanding of the principles, goals, and structures of MMS’s learning community setup. P1 disclosed that new members are “offered lesson plans and materials that the team uses” and indicated that these individuals can “go to anyone and they will be willing to help.” Despite differences in subject area, several other staff members agreed with P1 and believed that the procedures that are in place to welcome new members are advantageous and allow for the steady and uninterrupted PLC meetings to continue with little difficulty. For example, P4 commented that:

> In August, new teachers come in early for a 3-day training. We give every new teacher a mentor teacher. We try to provide someone to help them with curriculum and someone who is in the same learning community as themselves. This is so that they are able to talk about different ideas with their fellow teacher. A new teacher also gets the curriculum; this is the basis or a shell that they can go off of. They meet with other team members once a week also to receive support.

In addition, P3 discussed a new teacher to the team during the previous school year and explained that, “The ready-made units make it very easy for teachers to gain a sense of the curriculum, lesson flow, and the pacing and topics for the entire school year.” P6 maintain that the culture of sharing at Mapleville Middle School creates a “collegial environment.” Moreover, P6 revealed that new teachers are given a flash drive
that contains all of the lessons and supporting material for the year. In evaluating the aspects of familiarizing new teachers to MMS’s PLC operation, P5 postulated that while there is a structure for this, “There is insufficient coaching for these teachers in terms of allowing them to leave the meeting and to incorporate the practices into their respective classrooms.” P5 believed that increasing coaching would result in a, “greater transfer of learning from the professional learning community into the classroom.”

To create an environment that strengthens teacher practice and student learning, P1 discusses the practice of bringing student work to each meeting. “We look at the work sample and we try to understand why some are at the bottom, some are at the middle, and some are at the top.” This analysis of student work, according to P5, “is how teachers understand what must be altered in their classes to facilitate learning and effect change.”

**Shared and supportive leadership.** The participants in this researcher’s study had varying viewpoints related to the principals’ ability to utilize a shared leadership model, but most agreed that this area was not fully developed at Mapleville Middle School. P4 stated, “I don’t see a lot of shared leadership between the administration and the teaching staff.” P6 affirmed, “There are a few examples of shared leadership here. It just does not happen all the time.” P3 stated, “It is something that should happen more frequently because everyone should have a voice. The school is not only made up of one person.” P1 claimed, “We need more. Teachers need to have a voice. They have to be able to contribute to feel valued, so this is important.”

The participants varied in their belief about the extent to which they believed that the principal supported the staff members in cultivating the PLC. P3 disclosed that, “The principal comes in to our meetings only a few times and listens to the ideas. So, I don’t
know that the ideas that teachers have are fully listened to.” P1 revealed that, “Some ideas that are given are listened to and actually implemented with regards to curriculum and lesson planning.”

**Research question 4.** The researcher collected data from the interviews to answer research question 4. What PLC practices facilitate a change in the culture of the school? The research study provided the researcher with the opportunity to gather important information about specific principles and practices that are used in the professional learning communities and how these factors impact the culture of the organization. Table 4.5 displays the three categories that emerged from the interview data. These were structures, common assessments, and continuous revision of units and lessons. The following theme emerged – shared personal practice.

**Shared personal practice.** Shared practice involves the continuous use of common protocols, principles, and norms to serve as the catalyst for strengthening human capabilities and structures that are embedded in the PLC. This can include the establishment of a vision and the use of collective staff learning to address student needs. Mutual support and respect are essential for fostering a successful and sustainable learning community. These practices are in place within the teaching ranks as well as in the interaction between the administration and the educators at Mapleville.

**Structures.** Participants at Mapleville noted that the school leader is instrumental in devising a school culture that has data analysis at the core of its values and vision. P2 shared that:

What the principal does is to look at the data, then he breaks it down. He analyzes the teachers’ observation reports and information from the annual school
quality review. He tries to use the data to inform PLC practices, professional inquiry cycles, and teacher trainings.

Table 4.5

<table>
<thead>
<tr>
<th>Codes/Categories/Themes Research Question 4 - Mapleville</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codes</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1. Data analysis at core of values and vision, looking at student growth, Using technology, Plickers, principal analyzes teacher observation reports, protocol sheet for assessing students.</td>
</tr>
<tr>
<td>2. Find student misconceptions, quantify student growth, cross – classroom analysis, weaknesses strengthened.</td>
</tr>
<tr>
<td>3. Evaluation of units, new materials and resources, changes to the pacing calendar, enhancing educational materials, adding differentiated lessons.</td>
</tr>
</tbody>
</table>

P4 believes that the teachers are adept at “looking at overall student growth and identifying pockets of students that are not moving and then developing actions around that to boost student success.” P1 emphasized that continuous improvement takes place when “data is constantly analyzed to see trends and patterns in student performance. Assessing students regularly is also important to this process. There is a protocol sheet that facilitates this data dive.”

Five of the six interview participants touted the benefit of using technology in the classroom as a means of strengthening student engagement, bolstering student
achievement, and for producing real-time information about student performance. This, several participants disclosed, is done largely through Plickers. P4 revealed that,

This program, Plickers, enables teachers to pose questions to which students respond; the teacher then receives real-time updates on the percentage of students who answered correctly or incorrectly. This allows the teacher to identify student misconceptions and educators are then as a team, able to create lessons that target these weaknesses.

P5 indicated that, “Plickers positively impacted the schools’ culture by allowing there to be a dedicated and immediate response to student challenges.” P6 noted that:

The culture is more of a team; everyone can see the data from Plickers. Then teachers can understand where their students were strongest and where they struggled. They can then find commonality across classrooms and then locate resources to help improve student outcomes.

**Common assessments.** Assessments, such as benchmarks, allow for an analysis within and between classes and students. Common assessments that are developed by a team of teachers are beneficial in that they can inform and positively impact practice. Wiliam and Thompson (2007) posited that teacher created common assessments are a valuable tool to further develop teachers professionally. Schools that employ this strategy, these researchers assert, provide a clear understanding for teachers of how to accurately measure student learning. This practice promotes impactful teaching and learning. P4 commented, “Common assessments are necessary. They provide a starting point to help teachers to understand where students are and what they understand and what still is challenging.” Furthermore, P2 commented, “When the teams create common
assessments, it allows the teachers to identify additional supports for students and allows for individual teachers and the team as a whole to set learning and instructional goals.”

Three of the six participants viewed common assessments as a practice that does not only impact individual classrooms or specific students. Rather, these participants believed that the common assessment impacts the entire school and creates an environment that is conducive to continuous improvement. P3 discussed beliefs concerning this perspective:

These types of assessments foster critical examination of student results. If properly implemented, schools can thoroughly examine student progress at various stages to aid students in learning at greater levels. Assessments that are well-constructed provide a great amount of information and can lead to extensive dialogue that creates a culture of results and positive outcomes.

Moreover, the creation of common assessments guides some of the most important work that educators do. P5 stressed that, “Team members are able to collectively learn from each other and can make more informed decisions related to teaching and learning.” To further emphasize this point, P6 expressed the importance of building common assessments:

The data that we receive allows us to identify best practices. For example, we look at why one teacher is having success with a specific concept, and why others are not. This is a chance to share ideas and devise interventions to meet learning targets.

**Continuous revisions of units and lessons.** Engaging in continuous refinement of units and lessons is essential for a learning community to effect long lasting change
When teacher teams meet, the data that is analyzed, the findings are discussed, and action plans are written. As such, units and lessons are also revamped. This includes locating and incorporating varied materials, differentiating instruction to fit the needs and learning styles of students, and rewriting student learning objectives. P4 explained, “The lessons have to be altered. Students do not all have the same needs, so it is important to not have a one size fits all mentality.” P2 added an additional perspective:

I think that if the lessons are not examined and changes are not made, it will be impossible for teachers to meet the needs that students have. Lessons and units have to be regularly changed to ensure that proper strategies are being used. When done often a cycle of improvement becomes the norm. When we do this, the culture here at Mapleville reflects enhanced learning that informs instructional delivery.

**Questionnaire data findings and analysis – Mapleville.** Additional pieces of data were gathered from the PLCA-R. The questionnaire allowed the researcher to examine staff perceptions of the principal, staff, and various stakeholders at Mapleville Middle School. The staff who completed the questionnaire at Mapleville Middle School were as follows: three teachers, two assistant principals, and two paraprofessionals. The paraprofessionals at Mapleville have been employed in this role for 21 and 5 years respectively. The six dimensions that are measured by the PLCA-R are as follows: supportive leadership, shared values and vision, collective learning and application, shared personal practice, and supportive conditions-relationships and structures. The questionnaire allowed school staff to analyze the structures that were in place, the decision-making ability of the leader, and the culture and climate at MMS.
All responses were tabulated, and the parallel findings were examined between the responses and the research questions. The dimensions with the largest number of agrees and strongly agrees revealed effective PLC practices while the dimensions with the most disagrees and strongly disagrees were indicative of PLC elements that need to be reformed. Individual questionnaire responses were also examined to ascertain the strengths and weaknesses of MMS practices that support or hinder professional learning. The responses also allowed the researcher to determine whether MMS falls in the PLC development category of initiating (beginning stages), implementing (doing stage), or institutionalizing (stage of sustainability). Table 4.6 provides the details of responses to the questionnaire.

**Analysis of the six PLC dimensions at Mapleville.** The dimensions with the largest number of participants who agreed that these PLC components were present at Mapleville Middle School were: Collective Learning and Application, Supportive Conditions – Structures, and Shared Personal Practice. The participants’ high scores on these dimensions indicated that participants viewed these aspects of the learning community at Mapleville as effective and enmeshed in the school’s culture.

Based on the responses, 84% agreed or strongly agreed that collective learning and application were evident and 16% strongly disagreed or disagreed that the dimension was not evident. Similarly, 84% of participants indicated that shared personal practice is present in Maplesville’s PLC, while 16% either strongly disagreed or disagreed. Finally, 73% believed that supportive conditions-structures were present in the PLC while 27% strongly disagreed or disagreed that this aspect of the PLC was noticeable.
Table 4.6

PLCA-R Results from Mapleville Middle School Questionnaire

<table>
<thead>
<tr>
<th>Dimensions of PLCs</th>
<th>Total Responses to Statements under each Dimension</th>
<th>Total Agree/Strongly Agree (%) # equates to the number of responses in each category</th>
<th>Total Disagree/Strongly Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared and Supportive Leadership</td>
<td>77</td>
<td>47 (61%)</td>
<td>30 (39%)</td>
</tr>
<tr>
<td>Collective Learning &amp; Application</td>
<td>70</td>
<td>59 (84%)</td>
<td>11 (16%)</td>
</tr>
<tr>
<td>Shared Values and Vision</td>
<td>63</td>
<td>38 (60%)</td>
<td>25 (40%)</td>
</tr>
<tr>
<td>Supportive Conditions Structures</td>
<td>70</td>
<td>51 (73%)</td>
<td>19 (27%)</td>
</tr>
<tr>
<td>Supportive Conditions Relationships</td>
<td>35</td>
<td>24 (69%)</td>
<td>11 (31%)</td>
</tr>
<tr>
<td>Shared Personal Practice</td>
<td>49</td>
<td>41 (84%)</td>
<td>8 (16%)</td>
</tr>
</tbody>
</table>

The responses were disaggregated by the responses for agrees and disagrees for each question. The percentages were then calculated for these responses. Finally, the percentages for the positive responses were determined to arrive at the extent to which the Mapleville PLC is effectively operating in each of the six dimensions included in the PLCA questionnaire. The numbers listed under the headings SD, D, A, and SA represent the number of participants who selected each of those answers for questions 1-11. A majority of the staff members (68%) responded favorably to shared and supportive leadership practices, 68% indicated that there were established common values and a clear mission which guided MMS, 92% highlighted that collective learning principles exist and were applied, 81% revealed that there was a culture of shared personal practice,
79% of the staff suggested that there were supportive relationships at MMS that allowed for a sustained learning community, while 82% indicated that supportive structures were in place by which MMS’s professional learning communities operated and provided guidance for the staff. The overall average for Mapleville Middle School (MMS) was 78%. This percentage means that MMS was in the implementation stage of professional learning community development. In spite of the fact that the Mapleville community fell into the implementation range, the dimensions are interrelated and interdependent. Mapleville demonstrated characteristics of each stage, with the exception of non-demonstration. Table 4.7 provides details on dimension 1 which was shared and supportive leadership.

**Dimension 1 provides results on shared and supportive leadership.** The realm of shared and supportive leadership is one of the chief components of a high-functioning professional learning community. This dimension relates to the willingness of school leaders to develop meaningful relationships with staff members. It necessitates that the school leader collaborates with staff to share the decision-making power. Shared and supportive leadership also entails school leaders providing support in areas such as resources, technology, and curriculum development.

Based on Figure 3.1, MMS was operating at the implementation stage. Sixty eight percent of the participants believed that in the dimension of shared leadership, MMS was operating as a professional learning community. This means that decisions were made based on a distribution of responsibilities amongst staff members. It also relates to the structures that were put into place by leadership that allowed staff members to carry out the tasks associated with their roles. Five of the seven participants agreed
with the statement, “the principal incorporates advice from the staff members to make decisions;” while six of the seven participants relayed that, “leadership is promoted and nurtured among staff members.”

Of the participants, 68% believed that the dimension of shared and supportive leadership was present at Mapleville Middle School. This percentage is representative of a PLC whose stakeholders were in the process of putting systems into place around this practice. The statements with the highest rate of agreement were numbers 2, 6, and 11. Each of these items had a total of five of seven participants who agreed. Statements 2 and 6 are indicative of a culture in which the school leader allows staff members to share in the decision-making processes that impact the school community. Statement 6 also highlighted a culture of celebration and recognition by the principal of staff members who display innovation and creativity.

Additionally, there were several statements that showed a low respondent rate of agreement. These were statements 1, 3, 7, and 10. For each of these items, three of the seven participants disagreed. This accounted for 43% of participants per statement. Statement 1, which is very similar to statement 2, contained the word consistently. This revealed that while staff members partner in making decisions alongside the principal, it was not a regular occurrence. Statement 3 indicated that some staff members believed that they did not have access to key information. Finally, responses to statement 10 demonstrated that stakeholders did not voluntarily assume responsibility for student learning. Rather, the process was undertaken because of the power and authority held by the school leader.
Table 4.7

*Shared and Supportive Leadership Dimension 1 – Mapleville*

<table>
<thead>
<tr>
<th>Shared and Supportive Leadership Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Staff members are consistently involved in discussing and making decisions about most school issues</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>2. The principal incorporates advice from staff members to make decisions</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>3. Staff members have accessibility to key information</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>4. The principal is proactive and addresses areas where support is needed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>5. Opportunities are provided for staff members to initiate change</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>6. The principal shares responsibility and rewards for innovative actions</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>7. The principal participates democratically with sharing power and authority</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. Leadership is promoted and nurtured among staff members</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>9. Decision making takes place through committees and communication across grade and subject areas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>11. Staff members use multiple sources of data to make decisions about teaching and learning</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>8</td>
<td>22</td>
<td>42</td>
<td>5</td>
</tr>
</tbody>
</table>

More than half of the staff members affirmed that there were opportunities to initiate change. Respondents were almost equally divided on statement 10, “the principal is proactive and addresses areas of support.” Three participants either strongly disagreed or disagreed while four participants strongly agreed or agreed.
**Dimension 2 involves having shared values and a vision.** Within the professional learning community, this dimension is of importance to staff members. Defining a vision based on a shared set of values is an instrumental step that staff members must undertake to establish a clear direction for reaching the organization’s goals. A shared vision involves creating behavioral norms that will inform decisions related to teacher learning and student achievement. Table 4.8 highlights the responses for this dimension.

Of the participants, 68% believed that common values and vision was a core value at MMS. This percentage revealed that the site was in the implementation stage in the development of this dimension; this is indicative of a culture that has fundamental norms, principles, attitudes, and beliefs that serve as a guide for the direction in which participants are heading. The idea of shared values indicates that there is an environment that is student-focused, staff members hold a growth-mindset and are determined to set high expectations for students. The statement, “a collaborative process exists for developing a shared sense of values among staff,” had varying responses. Four of the seven participants agreed, two participants disagreed, and one participant strongly disagreed. While more than half of the participants agreed with statement 12, the fact remains that some respondents did not feel that they were involved in the creation of the vision and mission. Of the nine statements related to this dimension, none of the participants selected a response of strongly agree. This reveals that while there were some aspects of shared values and vision at MMS that had not firmly taken root.
In the dimension of shared values and vision, there were only two participants who strongly agreed with the statements in this section. One participant strongly agreed with the statement, “shared values support norms of behavior that guide decisions about teaching and learning.” Three participants agreed. These responses suggest that while there was evidence that shared values impact the teaching and learning that occurs at Mapleville, there was a need for greater accountability and a solid set of norms to guide

### Table 4.8

**Shared Values and Vision Dimension 2 – Mapleville**

<table>
<thead>
<tr>
<th>Shared Values and Vision Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. A collaborative process exists for developing a shared sense of values among staff.</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>13. Shared values support norms of behavior that guide decisions about teaching and learning.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>14. Staff members share visions for school improvement that have undeviating focus on student learning.</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>15. Decisions are made in alignment with the school’s values and vision.</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>16. A collaboration process exists for developing a shared vision among staff</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>17. School goals focus on student learning beyond test scores and grades.</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>18. Policies and programs are aligned to the school’s vision.</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>19. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>20. Data are used to prioritize actions to reach a shared vision.</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>6</td>
<td>19</td>
<td>36</td>
<td>2</td>
</tr>
</tbody>
</table>
the teams at this study site. Five of the seven respondents indicated that the staff shared common visions for school improvement and were committed to positively impacting student learning. Of the staff, 71% responded unfavorably to the statement, “stakeholders are actively involved in creating high expectations that serve to increase student achievement.” More than half of the participants perceived that decisions were made in alignment with the school’s values and vision. A majority of the participants, 86%, believed that Mapleville’s policies and programs were aligned to the school’s vision.

**Dimension 3 involved the concept of collective learning and application.** The dimension of collective learning and application involves various school staff working collaboratively to address challenges and to locate solutions to remedy these issues. This realm involves school staff partnerships being formed to seek knowledge and to apply the new learning to the work that must be done. These collaborative relationships, when applied regularly, will result in continuous improvement.

Within the collective learning section of the questionnaire, 92% of the participants indicated that this dimension that encompassed questions 21-30 on the Professional Learning Community – Revised questionnaire were present at Mapleville. This percentage revealed that Mapleville was in the latter phase of PLC implementation – institutionalization. This means that there was an application of the skills, knowledge, and principles that are developed as a result of the PLC being in place.

Table 4.9 provides detail on the responses relating to collective learning as they pertain to dimension 3. It is during this stage of PLC implementation that the innovations that begin as experimental trials become routine and increase in frequency and consistency. The statements in this area focused on the collaborative relationships that are fostered and exist at MMS.
<table>
<thead>
<tr>
<th>Collective Learning and Application Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Staff members work together to seek knowledge, skills, and strategies and apply this new learning to their work</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>22. Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>23. Staff members plan and work together to search for solutions to address diverse student needs.</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>24. A variety of opportunities and structures exist for collective learning through open dialogue.</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>25. Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>26. Professional development focuses on teaching and learning.</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>27. School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>28. School staff members are committed to programs that enhance learning.</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>29. Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>30. Staff members collaboratively analyze student work to improve learning.</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Totals for each category | 0 | 11 | 50 | 2 |
Within this section, none of the participants selected strongly disagree for any of the statements. Three of the seven participants disagreed with the statement, “professional development focuses on teaching and learning, while four respondents agreed; three of the seven participants strongly agreed, and four participants agreed when asked to respond to the statement, “staff members plan and work together to search for solutions to address diverse student needs.” Two participants provided a response of strongly agree to question 30, “staff members collaboratively analyze student work to improve teaching and learning; the remaining five participants selected agree. All seven participants selected agree when responding to, “staff members work together to seek knowledge, skills, and strategies and apply this new learning to their work.” Staff members’ responses highlighted that this dimension was the strongest in regard to the effective functioning of the professional learning community. The responses demonstrated that staff members were committed to programs that enhance learning.

This dimension had no participants who strongly disagreed with any of the statements. There was a total of 52 favorable responses compared to 11 unfavorable replies. All of the study participants believed that staff members worked together to acquire and strengthen their professional knowledge. This knowledge was then applied as a means for improving classroom practice and deepening teaching skills. Open dialogue, continuous inquiry, and data analysis were also revealed as core tenets of the professional learning community at Mapleville Middle School. Six of the seven participants, or 86% of the respondents contended that staff members were committed to employing programs that heighten student academic achievement. The responses that were garnered for this dimension suggest that Mapleville staff members do not complete
tasks in isolation, but rather ally to transform both the pedagogical and academic environment. Table 4.10 indicates the results for dimension 4 – the idea of shared personal practice.

**Dimension 4 explores the idea of shared personal practice.** This professional learning community attribute revolves around staff members devising a set of guidelines and principles that serve as a compass for the direction of the team. The activities that are carried out by the learning community team serve the following purposes: encourage leadership amongst staff, promote a culture of shared information, and cultivate broad-based decision-making.

Questions 31-37 addressed the major components of shared personal practice. Of the respondents, 81% believed that shared personal practices exist at MMS. This corresponds to the implementation stage. This suggests that analysis of student work, cross analysis by classroom and by individual student, and the opportunity for informal peer observations existed at this study site. Responses to these items displayed that staff members believed that there were opportunities to observe the instructional practices of their peers, offer feedback to their colleagues, and provide and/or receive mentoring from their colleagues. For example, on the statement, “opportunities exist for staff members to observe peers and offer encouragement,” one participant disagreed, five agreed, and one strongly agreed. Additionally, question 37 stated, “staff members regularly share student work to guide overall school improvement.” One respondent strongly agreed, four agreed, and two disagreed. Five respondents agreed, one participant strongly agreed, and one participant disagreed with the statement, “Individuals and teams have the opportunity to apply learning and share the results of their practices.”
Table 4.10

*Shared Personal Practice Dimension 4 – Mapleville*

<table>
<thead>
<tr>
<th>Shared Personal Practice Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>32. Staff members provide feedback to peers related to instructional practices.</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>33. Staff members informally share ideas and suggestions for improving student learning.</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>34. Staff members collaboratively review student work to share and improve instructional practices.</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>35. Opportunities exist for coaching and mentoring.</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>36. Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>37. Staff members regularly share student work to guide overall school improvement.</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Totals for each category: 2, 7, 32, 8

The majority of respondents responded favorably to the statements in this dimension. A total of 71 of the participants agreed with each of the following statements:

- Opportunities exist for staff members to observe peers and offer encouragement
- Staff members collaboratively review student work to share and improve practice
- Individuals and teams have the opportunity to apply learning and share results of their practices
This data revealed that there was a strong collaborative culture at Mapleville Middle School. Staff members used data collectively to improve instructional practices. There were opportunities to view practice firsthand and to offer constructive feedback to one’s colleagues.

**Dimension 5 was the idea of supportive conditions and relationships.** This dimension necessitates the development of strong collegial relationships. A professional learning community that is at an advanced stage in this area results in increased levels of trust, respect, and positive relationships amongst students, educators, and administrators. Staff members who are involved in professional learning communities that are effective in this area may potentially: engage in candid conversations related to student learning, confront challenges, or create accountability practices to guide the team.

Table 4.11 outlines responses related to dimension 5 – supportive conditions relating to relationships. Of the participants, 79% indicated that supportive relationships were noticeable at Mapleville Middle School. This average disclosed that MMS was in the implementation stage of PLC development in the dimension of supportive relationships. Questions 38-42 assessed various aspects of this dimension. This dimension is related to the following: a culture of strong relationships between staff and students, an atmosphere of trust and respect, celebrations of successes and achievements, an environment that promotes positive change that includes using data as a team to enhance teaching and learning.

In response to the statement, “caring relationships exist among staff and students that are built on trust and respect,” five respondents agreed, and two participants disagreed. Furthermore, question 39 – “a culture of trust and respect exists for taking
risks, had the following outcomes: five participants agreed, one participant disagreed, and one participant strongly disagreed. Three respondents indicated that they did not believe that outstanding achievement was recognized and celebrated regularly, two participants agreed, and two participants strongly agreed with this contention.

Table 4.11

**Supportive Conditions (Relationships) Dimension 5 – Mapleville**

<table>
<thead>
<tr>
<th>Supportive Conditions – Relationships Statements</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>38. Caring relationships exist among staff and students that are built on trust and respect.</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>39. A culture of trust and respect exists for taking risks.</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>40. Outstanding achievement is recognized and celebrated regularly in our school.</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>41. School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>42. Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>3</td>
<td>8</td>
<td>21</td>
<td>4</td>
</tr>
</tbody>
</table>

**Dimension 6 supportive conditions – structures.** The sixth PLC dimension, involves the creation and implementation of structures that support proper learning community functioning. Many school communities experience significant challenges in the creation of high-quality learning communities when proper structures are not devised. Supportive conditions in learning communities must involve a number of stakeholders including parents, educators, and administrators to affect long lasting change.
The sixth and final dimension measures PLC components related to the formation and arrangement of structures that allow the professional learning community to be sustainable and effective. This includes PLC aspects such as sufficient time to work collaboratively, the availability of monetary funds to facilitate professional development training, the availability of technological tools for staff use, a well-maintained school facility, a variety of systems to communicate with stakeholders – including parents and community members, and the ease of accessibility to data for staff.

A total of 7 of the questionnaire participants indicated that supportive conditions were present at Mapleville. This average falls into the implementation stage. This percentage indicates that there was ample sustained professional development, rewards for teachers who make progress throughout the PLC process, and sufficient staff who provide support for continuous learning. Five of the seven participants posited that there was sufficient time for collaboration; one participant disagreed, and one participant strongly disagreed.

When questioned about sufficient fiscal resources, four participants responded in a manner that showed that adequate resources were available; one participant selected strongly agree, one participant selected disagree and one participant selected strongly disagree. More than half of the participants indicated that data were organized and made available to staff members. Additionally, data were also provided to a number of stakeholders including central office personnel, parents, and the local community. Table 4.12 provides the results for supportive conditions – dimension 6.
Table 4.12

Supportive Conditions (Structures) Dimension 6 – Mapleville

<table>
<thead>
<tr>
<th>Supportive Conditions – Structures Statements</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>43. Time is provided to facilitate collaborative work.</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>44. The school schedule promotes collective learning and shared practice.</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>45. Fiscal resources are available for professional development.</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>46. Appropriate technology and instructional materials are available to staff.</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>47. Resource people provide expertise and support for continuous learning.</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>48. The school facility is clean, attractive, and inviting.</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>49. The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. Communication systems promote a flow of information among staff members.</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>51. Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52. Data are organized and made available to provide easy access to staff members.</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>7</td>
<td>12</td>
<td>48</td>
<td>3</td>
</tr>
</tbody>
</table>

Questionnaires informed research question 1. The first research question posed was: What are the perceptions of school staff regarding the impact of PLCs on their learning and effective teaching practices? This was related to the dimensions of
supportive conditions – relationships and shared and supportive leadership. These two areas are integral for a PLC to function effectively. Teachers collaborating and school leaders sharing leadership and involving staff members in the decision-making process were significant as noted by respondents in both the questionnaire and the interviews. MMS was operating at implementation stage in both of these dimensions. Based on the participant responses, 68% of respondents reacted positively to statements related to shared and supportive leadership, while 79% answered favorably to statements in the dimension of supportive relationships. Figure 3.1 emphasizes that this stage includes the following aspects of PLCs: collaboration, problem solving, trust and respect has been established, and a focus on students along with high expectations. Throughout the interview and questionnaire completion process, participants highlighted multiple examples of positive relationships that existed amongst school staff. The participants also cited some opportunities to have a voice in the PLC decisions that were made by the administration.

**Questionnaires informed research question 2.** Research question 2 was as follows: How do PLCs affect classroom pedagogy and the academic environment? Research question 2 inquired about teacher instructional practice and the culture of learning that is created and fostered. In the shared values and vision dimension, five of the seven participants either strongly disagreed or disagreed with the statement, “stakeholders are actively involved in creating high expectations that serve to increase student achievement.” Moreover, three of the seven participants disagreed with the item that assessed whether data was used to prioritize actions. These responses indicated that staff members did not believe that the PLC was having a significant effect on their
pedagogy and the academic performance of MMS’ student body. Of the statements that were included in this dimension, respondents either disagreed or strongly disagreed with 40% of them. This is consistent with the findings of the interviews. While many staff members indicated that there was a culture of collaboration, some found that this was inconsistent amongst all classrooms, subject areas, and grade levels. Almost half of the staff members responded negatively to the statement, “a collaborative process exists for developing a shared sense of values among staff.” None of the respondents disagreed or strongly disagreed with the statements: “collegial relationships exist among staff members that reflect commitment to school improvement efforts” and “school staff members are committed to programs that enhance learning.” Furthermore, Table 4.7 reveals that 92% of participants responded favorably to the statements within the collective learning and application dimension. These findings are consistent with results of the interviews that indicate that a collaborative environment that is focused on the achievement of students was present at MMS.

**Questionnaires informed research question 3.** Research question 3 asked: What are the strengths and weaknesses of the implementation of a PLC as perceived by the instructional staff? The dimensions of shared values and vision and shared and supportive leadership were both areas of strength at Mapleville Middle School. Both categories involve staff members working closely with one another to ensure that structures are solidified that allow PLC members to work closely with the administration to share decision-making, accountability, and pertinent information to effect change in teaching and learning both for staff and for students. On statements such as, “staff members have accessibility to key information” and “the principal participates
democratically with staff sharing power and authority, several participants strongly disagreed or agreed. These results indicate that the Mapleville community was implementing some aspects of the PLC dimensions, and very little components of others. On the other hand, Table 4.4 highlighted that collective learning and application was the dimension with the highest favorable responses. The questions contained in this section indicated that staff members worked collaboratively to gain knowledge and skills that were then used to address student needs. Additionally, four of the seven participants, which accounted for 57% of the responses, believed that those responsible for allocating and providing resources, both in terms of tangible materials and personnel, did not provide them sufficiently to foster continuous learning.

**Questionnaires informed research question 4.** Research question 4 asked: What PLC practices facilitate a change in the culture of the school? This research question is aligned with questions in the dimensions of shared personal practice and supportive conditions – structures. These dimensions relate to staff members reviewing student work, opportunities for mentoring and coaching, staff providing feedback to one another, and staff being given time to collaborate regularly. Within the realm of shared personal practices, 81% of the staff indicated that there were habits embedded in the school’s culture that allowed for the PLC to run smoothly, and 82% of the respondents indicated that supportive structures allowed for the PLC to be effective. These numbers demonstrate that MMS’s learning community was at a high level of sustainability in these categories. This revelation is similar to the themes that were produced from the interviews. This included teacher collaboration because the teachers at this site were meeting regularly to assess student work, create action plans, and participate in
intervisitations. These practices also relate to a second interview theme – a focus on learning. Both the interviews and the questionnaires revealed similarities in the components of the professional learning community that were present at Mapleville Middle School. Teachers are dedicated to employing structures that impact student achievement.

**Mapleville summary.** Mapleville Middle School’s professional learning teams were operating at the implementation stage of PLC development. There was a strong culture of collective learning based on participant responses in both the interviews and the questionnaires. Team members worked collaboratively to assess student work, create a clear vision for the direction that the learning community will be heading, and design structures that will promote growth, engage stakeholders, and cultivate a community of learners. The school was focused on results, and as such, practices including intervisitations, in which host teachers can receive feedback from their peers, has become an integral component of Mapleville Middle School’s culture. The collegial relationships that existed allowed for the exchange of ideas amongst school staff. Study participants indicated that insufficient time was one of the chief barriers to effecting change in the classroom. There are instances where sufficient time was not allotted to carry out the responsibilities of the PLC. Furthermore, the type of meeting that was held on a weekly basis also affected the outcome of the learning community. Participants revealed that when common subject areas and/or grade level teachers met, the outcome was much more impactful, and the members were productive and better able to meet their goals.
Collaborative Middle School

This case site was a middle school serving 497 students in grades 6-8. The ethnic groups that were most prominent at this school were Black at 62%, Hispanic at 32%, Asian at 4%, and White at 1%. Students with disabilities accounted for 28% of the population while English language learners constituted 8% of the student body. Seventy-two percent of the teachers have 3 or more years of experience.

Research participants – CMS. The participants included three teachers, two assistant principals, two paraprofessionals, and the principal of the school. The teaching experience of each of the study’s participants varied. The interview participants in this setting were as follows:

- Participant 1: 12 years of teaching experience (middle school – ELA), master’s degree.
- Participant 2: 11 years of teaching experience (middle school – social studies), master’s degree.
- Participant 3: 3 years of teaching experience (middle school – math), master’s degree.
- Participant 4: 7 years of teaching experience (middle school – math), master’s degree.
- Participant 5: 8 years of teaching experience (middle school), master’s degree.
- Participant 6: 10 years of teaching experience (middle school), master’s degree.

The researcher analyzed the data from interviews with participants from Collaborative Middle School. The data was coded and categorized. Overarching themes
Research question 1. What are the perceptions of school staff regarding the impact of PLCs on their learning and effective teaching practices? Participants were asked to provide their perspective on whether or not the PLC had an impact on the amount of learning that they themselves experienced and the instructional climate of their classrooms. The following four categories resulted from participants’ responses: teacher collaboration, professional development, teacher empowerment, and intervisitation. The emerging theme for this data set was teacher support. Table 4.13 highlights the code and related categories around the theme of collaboration.

Teacher support. Building a community of teacher learners and leaders is an instrumental part of the professional learning community process. Teachers can receive supports from a number of structures that are created in their respective school sites. Collaboration with their peers allows for the reduction in isolation, improves the likelihood that individual and collective goals are met, which can potentially result in increased student effort and success.

Teacher collaboration. Several participants identified teacher collaboration as one aspect of the PLC that promoted effective teaching and learning. P3 indicated that the PLC improved the learning of the staff and stated, “I have had a good experience with the learning community. This is my second year of teaching, and it was really helpful to me to work with other teachers and for us to plan together.” P1 concurred and noted, “You are able to bounce ideas and questions off of one another. Sometimes one person is not enough and two minds working on the same goal is better than one.”
Table 4.13

*Codes/Categories/Themes Research Question 1 - CMS*

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Plan together, bounce ideas off of one another, two minds better than one, exchange of ideas, talk with each other, vertical planning, effective teaming</td>
<td>1. Teacher Collaboration</td>
<td></td>
</tr>
<tr>
<td>2. Training based on staff need, retreats, professional learning, differentiated teacher training, teachers drive professional learning</td>
<td>2. Professional Development</td>
<td>Teacher Support</td>
</tr>
<tr>
<td>3. Better/master teacher, more experience, teachers are free to voice their opinions, change social structures, teacher choice, control over culture, improved practice, strengthen learning, decision-making</td>
<td>3. Teacher Empowerment</td>
<td></td>
</tr>
<tr>
<td>4. lessons are demonstrated, sit together as a cluster and view lessons, feedback, lesson improvement</td>
<td>4. Intervisitation</td>
<td></td>
</tr>
</tbody>
</table>

Several participants mentioned the benefits of collaborating to share ideas and effect change. P2 stated,

*I like as a community, we have taken a big step in collaborating with our peers and that we use that time to talk to each other. We talk about our own ideas, share about what works and what doesn’t work, so that we can grow, – both based on what is needed for students and staff.*
P4 emphasized, “As a team, we try to build a solid plan, and then we work together to plan, sometimes vertically, to get systems in place that will improve the instruction and the students’ levels of understanding.” For P6, collaboration involved more than just the meeting and exchange of ideas amongst teachers; it also involved ensuring that the appropriate staff members were working collectively, dependent on task. In fact, P6 stated:

Sometimes, the task might mean that literacy teachers may need to work together or sometimes it may need to be a meeting with, one seventh, and one eighth grade math teacher. At times, the group may need to be one person from each subject, or who is strongest in a specific context such as classroom management or differentiation.

**Professional development.** Four of the six participants indicated that effective teacher professional development has a long-lasting effect on teacher instructional capability and student achievement. P5 expressed:

We have created departmental and cross-departmental professional development based on the weaknesses and the challenges that we see throughout the school year. The PD is cyclical and ongoing and when done right, students and teachers benefit. Students improve their overall rate of academic success.

P4 advocated for a professional development structure that puts the teachers in charge of the training that was received:

I think that at this point, the outside professional development trainings are good when we have teachers come back and turnkey what they have learned. I think that we do it, but on a small scale; it is something that we need to do more of.
Even when we have retreats, this helps with advancing professional learning. This allows teachers to take ownership of these sessions when they can share with other members of the team and the whole learning community. This, to me, keeps teachers motivated, and keeps the conversation going.

P1 expressed the significance of job-embedded professional development in which the training was provided within the everyday work context, and not as separate entities. P1 remarked:

The PLC helps you to better understand the job so that you can become a master teacher. When the activities are a part of the everyday tasks that teachers must complete, this makes it more meaningful. This can be looking at artifacts of student work, revamping assessments, or locating and including differentiated materials. I think that teachers would be more invested in activities such as this because it directly relates to their roles and their expectations. It also cuts down on professional development training seeming as if it is an unnecessary and not aligned with the varying responsibilities that teachers are charged with.

**Teacher empowerment.** After review of the interviews, it was noted from respondent comments that teacher empowerment impacted teacher learning and school culture. P6 disclosed, “When teachers are able to drive what happens in their professional learning, they feel more invested and more involved in the decisions that are made.” P5 indicated agreement and stated, “Teachers meet to assess units, student work, and lessons. Being able to personalize these things makes them feel as though they are leaders in their own right who can make decisions to affect their classrooms.”
P2 discussed ways in which the administration impacted the degree to which teachers feel a true sense of empowerment. P2 expressed:

The administration keeps everything open and lets us come up with our own ideas by implementing things that we like or by allowing us to use certain materials. This pushes things in the right direction. This lets the teachers know that their opinion is valued and that the administration trusts their ability to make sound decisions that impact the classroom and the individual teaching staff.

P4, on the other hand, revealed that teachers felt a strong sense of shared leadership when they were provided with the opportunity to attend professional development sessions and to share their learnings. P4 asserted:

I think that at this point outside professional development trainings allow teachers to come back and share the information that is presented at these sessions. This allows teachers to take ownership because they receive information and bring it back to their team and together, they can decide how to incorporate it into their own professional learning communities, classrooms, and instructional practices.

Three participants expressed that teachers visiting one another’s classrooms had a significant impact on the culture and academic environment at Collaborative Middle School. P2 shared how this happens:

We take turns intervisiting each other’s classrooms. Lessons are demonstrated, and we watch while this is going on. The other teachers take notes and give feedback to each other on what worked, what didn’t work, and participate in general observations on a rotational basis, so that each of us gets an opportunity.
We then incorporate the feedback into our lesson plans, instructional styles, and general classroom practices.

P5 described the way in which intervisitations effect positive change. P5 contended,

After the intervisitations are conducted, notes are taken by the teachers who are observing. The notes are then subsequently examined, and a running list of best practices are identified. Afterwards, other teachers try them out and then report to the group on whether these strategies are effective in correcting specific challenges.

P3 further discussed the positive outcomes associated with intervisitations. P3 stated, “After intervisitations, we can discuss what was observed, ask questions, and get clarification on the entire process. The intervisitation can also help me understand how to relay information and scaffold for your own students.”

**Research question 2.** This question relates to the PLC and its impact on classroom pedagogy and the academic environment. The categories that emerged from this research question were as follows: student growth, mindset of continuous improvement, and shared vision and goals. The resulting theme was collective responsibility. Table 4.14 provides details on the codes, categories, and themes for research question 2 – CMS.

**Collective responsibility for learning.** At Collaborative Middle School, there was an academic culture in which the pedagogues shared responsibility for the learning that the students at this site were able to experience. Teachers have recognized that there is strength in numbers and have pooled their collective resources and ideas to ensure that students are successful and are experiencing growth across subject areas and classrooms.
Table 4.14

*Codes/Categories/Themes Research Question 2 – CMS*

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Continuum from grade-to-grade, student improvement, take it to the</td>
<td>1. Student Growth</td>
<td>Collective Responsibility for Learning</td>
</tr>
<tr>
<td>next level, transfer of learning, goals are revisited, meet student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. See if there is progress or growth, ongoing assessment, challenge</td>
<td>2. Mindset of Continuous Improvement</td>
<td></td>
</tr>
<tr>
<td>us, support the deficits, expectations are reinforced, high expectations,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>set goals, examine results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Willingness to act and experiment, common vision, guidelines for</td>
<td>3. Shared Vision and Goals</td>
<td></td>
</tr>
<tr>
<td>inquiry support, trust in the team, support students and staff, on the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>same page, the need for richer and deeper discussion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Student growth.** Throughout the interviews, it became apparent that the team invested a substantial amount of time to ensuring that students were achieving academically. Several participants indicated that the need for a smooth transition from grade-to-grade would be essential to ensuring that the learning that students encountered did not become limited to a single grade and/r subject area. P4, for example, discussed the need for specific systems to be put into place to drive student improvement. P4 posited:

I think that there now needs to a shift, a continuum, between sixth, seventh, and eighth grade where there aren’t so many holes and there is more communication
amongst the teachers of these grades. The same types of strategies, similar materials, pooled resources, and assessments should be utilized. If it works, we should continue to try it to promote success in the student body.

Similarly, P5 discussed the advantage of utilizing common strategies to sustain growth. P5 maintained:

After looking at where students are, it is a good idea to research one of two strategies to address any area of weakness; that strategy is then incorporated into the teacher’s lessons to continue to impact the achievement level of the students. We want them to grow and not remain stagnant, but rather to take it to the next level.

P1 explained the manner in which teachers are able to improve students’ academic proficiency by analyzing tangible work products. P1 noted:

You can tell that there is a transfer of learning. This is done through the student portfolios that are created and maintained in the classrooms. You are able to get a sense of the students’ strengths and weaknesses. The teachers are able to review what students have done and can take it to the next level by changing their instruction or changing the way in which something is taught – whether by the type of worksheet that is used or the end-product to address areas of deficiency.

P2 added that student growth can be impacted if there is clear and open communication with parents. P2 stressed, “There is an online gradebook. This gives parents access to their children’s grades and allows them to see where the child might be struggling.” This is also another way to have the needs of students met.
**Mindset of continuous improvement.** Although the grade level and departmental teams have established a pacing calendar, curriculum maps, and scope and sequence documents, the team displayed a desire to consistently improve and revamp unit plans, lessons, and assessments that are utilized within the curriculum.

**Shared vision and goals.** The six participants expressed that there was a shared vision and goals at Collaborative Middle School. There is a high level of agreement that CMS had a shared vision and goals that were focused on student learning and teacher improvement. P6 stated that, “There are a set of core beliefs that are central to the school community that keep the end goal of success clear.” P4 noted that the decisions that were made were based on, “ensuring that the students learn, and the teachers improve through the collaborative PLC process.”

Participants varied in their beliefs about the extent to which there should be common schoolwide goals. P3 believed:

Just as there is differentiation in the classroom with materials, texts, and seating, there should also be differentiation in the classroom goals. Not every child or every class struggles with the same concepts, so there should be more of a push to allow teachers to set goals for their classrooms as well, based on their professional opinion.

P1 stated, “Student goals are an important part of the school vision because we can see what students need and then set objectives to ensure that the challenges that are being experienced are addressed.”

Another aspect of the school vision that participants identified as important was the mindset that everyone bears responsibility for student learning. P5 maintained:
All members of the school community are responsible for the students’ performance. They are our responsibility. We have the responsibility as a whole group to ensure that they are successful. This is not just for the teachers. This is for the paras, the assistant principals, and the principal. Everyone has a role to play for the vision to be achieved.

P2 also was of the belief that the CMS’ vision was one that is collectivist rather than individual. P2 voiced:

Staff collaboration that is focused on achievement is part of the school’s vision. We work together to identify problems and create solutions that are realistic and practical. I believe that the staff and the vision are focused on getting better. We know that doing this alone is not easy. Working together is good for generating ideas and improving the culture and the classroom.

**Research question 3.** This research question addressed the strengths and weaknesses, from participants’ perspectives, of the professional learning community that operated at Collaborative Middle School. Four major categories emerged. These categories were constant communication, collective work on curriculum, instruction, assessment, time, and reflective conversations. This data resulted in an overall theme of strengths and weaknesses of the professional learning community. Table 4.15 highlights the codes, categories, and themes for research question 3 – CMS.

**Strengths and weaknesses of the professional learning community.** Professional Learning Communities have traditionally had benefits and drawbacks. The staff members’ perceptions of the current model at CMS revealed that the strengths of the framework outweighed the detrimental aspects.
Table 4.15  
*Codes/Categories/Themes Research Question 3 – CMS*

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Speak with other teachers, planning and brainstorming, deeper discussion, regular feedback, talk with one another, open line of communication</td>
<td>1. Constant Communication</td>
<td></td>
</tr>
<tr>
<td>2. Sit together and come up with strategies, analyze student work, improve student performance, experiment with different tasks, activities, and materials, recreate assessments</td>
<td>2. Collective Work on Curriculum, Instruction, and Assessment</td>
<td>Strengths and Weaknesses of the Professional Learning Community</td>
</tr>
<tr>
<td>3. Not enough time to meet, regular meeting times, too much time spent on inquiry cycles, devoted times for staff professional development</td>
<td>3. Time</td>
<td></td>
</tr>
<tr>
<td>4. Discuss student results, evaluate if things are working, figure out the successes in student work, decide on next steps.</td>
<td>4. Reflective Conversations</td>
<td></td>
</tr>
</tbody>
</table>

**Constant communication.** The first category to emerge from research question 3 was that of constant communication. Three of the six participants acknowledged that regular communication was a significant aspect of the PLC at this site. Participant responses revealed that while there was a dedicated Tuesday afterschool meeting time, teachers met informally at other times to discuss student progress, challenges that had arisen, and how to adequately utilize resources to create a more stimulating and effective academic environment. P3 described the benefit of communication within the professional learning community by stating:
Communication with other members of the professional learning community is definitely great. It gives members the opportunity to work as a team and not as individual educators who make decisions alone. Talking to my colleagues keeps ideas flowing and allows the teachers to constantly adjust and takes away the desire to work alone. When we communicate, we get to learn new processes and share ideas.

P4 agreed and stated:

Maintaining an open system of communication helps to develop trust and respect within the PLC. It gives everyone the opportunity to share their thoughts and to be an active part of the learning community. The staff can operate in a culture that is responsive to needs of the staff and students.

**Collective work on curriculum, instruction, and assessment.** The culture of Collaborative Middle School is such that staff members worked collegially to revamp and refine the curriculum, instruction, and assessments. P4 postulated:

The thing that we do is that we participate in inquiry collectively. For example, we might start by looking at the state scores or the quarterlies. Then, we look at the curriculum to assess how well it aligns with the concepts that we are teaching. We look at what is working and what needs to be changed.

Similarly, P3 stated, “We sit down and examine the performance of students on a specific task. All of the teachers in the meeting sit down and talk to figure out what went well and what needs to be changed within the curriculum or the unit.”

On the other hand, P6, described the process that was used when teachers at Collaborative Middle School were analyzing individual pieces of student work. P6 said,
In terms of assessment, when everything in terms of data is gathered, then the question – how we adjust is posed. So, we look at student misconceptions and erroneous answers and decide upon strategies for reteaching the material. We want to reteach these concepts in hopes of increased student performance. Next, the lessons in the unit are altered or if there are lessons that need to be added, then this is done. As part of this process, a specific student product must be focused on. After this happens, data is once again reexamined to see if there is any additional improvement. Action steps are also created to guide the data analysis process.

**Time.** Lack of time is often identified as an impediment to high quality professional learning communities. Such is the case at Collaborative Middle School. P4 propounded that it was difficult to balance the creation of sufficient lessons to prepare students for the state exam with teaching all parts of the curriculum. P4 declared:

> Our biggest challenge is balancing between preparing the kids for the state exams and providing a well-rounded curriculum; that is at the heart of the PLC. We want to educate students and not get into the teach to the test mode. Sometimes, the time is spent teaching to ensure that the students are prepared adequately for the state exam, but then we may not have enough time to work in the PLC to teach students what they need as a whole.

P2 also identified time as a challenge for completing thorough and in-depth inquiry work. This participant mentioned that, “Everyday occurrences like coverages sometimes affect our ability to meet and complete inquiry work. So, time is a challenge, definitely, we sometimes do not have enough of it” (P2).

The notion of insufficient time was also summarized by P6:
Time is also a constraint just in terms of relinquishing responsibility. You have to explain as a leader what needs to be done, and then you must allow the team to do it. If the leader spends too much time holding the reins, the team may not have sufficient time to produce a quality product.

While insufficient time for inquiry work was discussed as an obstacle to effective PLC functioning, P5 described the length of time that was spent on certain aspects of the PLC meting as being a challenge. P5 proclaimed, “The least beneficial practice is probably the amount of time that is spent on some stages of the inquiry cycle. The timeframe is sometimes too tedious and repetitive for staff.”

**Reflective conversations.** Through data gathered during the interview process, it was revealed that the team at Collaborative Middle School engaged in reflective conversations that are an integral part of the desire for continuous improvement.

Immediately following the teaching of a unit or a specific lesson, the participants conceded that analyses were regularly conducted to ascertain what went well and what needed to be altered to bolster student achievement, enhance teacher instruction, and expand student engagement. P5 explained,

Teachers bring student work to the meetings. There is a specific protocol that they complete prior to the meeting. During the meeting they look at common mistakes and discuss areas of student strength and weakness. This is a good way to talk about the common issues that arise in the classroom.

P3 further emphasized,

For example, if I am teaching an English Language Arts (ELA) class, I will have conversations with other teachers to see what is going and to see what has been
learned and what still needs to be accomplished. We look at the work product and discuss what can be changed to meet every students’ needs.

**Research question 4.** This question assessed the impact that the professional learning community had on the culture of Collaborative Middle School. Several categories emerged from the data. These categories were collective problem-solving, high expectations for all learners, and shared workload/accountability. The theme that emerged from this research question was a mindset of continuous improvement. Table 4.16 highlights the codes, categories, and themes related to research question 4 at CMS.

Table 4.16

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work with teacher leaders to improve structures, collaborate to take out things that are not working, figure out why students did not do well, examine data together to make changes</td>
<td>1. Collective Problem – Solving</td>
<td>Mindset of Continuous Improvement</td>
</tr>
<tr>
<td>2. Belief in all students, every child can succeed mindset, student growth, students are encouraged to take risks</td>
<td>2. High Expectations for all Learners</td>
<td></td>
</tr>
<tr>
<td>3. Must prepare for meetings, work collaboratively, buy-in from members, collectively analyze student work</td>
<td>3. Shared Workload/Accountability</td>
<td></td>
</tr>
</tbody>
</table>

Mindset of continuous improvement. The interview data revealed that the staff members at Collaborative Middle School believed that the culture at this site was one in which members were committed to promoting continuous improvement. The culture was
also such that members held one another accountable for increased student achievement and expanded educator learning. This leads to regular monitoring of the PLC’s functioning.

**Collective problem-solving.** The members of the CMS learning community worked collaboratively to ensure that issues that arose were able to be resolved. They worked collectively to solve problems. The members ascribed to the strength in numbers philosophy. The teachers met regularly to discuss challenges that come to light and then worked collectively to find solutions to combat issues that were discovered during the formal and informal learning community sessions. P6 stated:

The professional learning community is a means by which members are able to see what problems are occurring in the classroom, in student work products, or in the instruction itself. This is how the issues get resolved. Once the challenges are identified, then the members create practical solutions that can address the difficulties that are present. Everyone works together, which is key, because there are a lot of different ideas and they can all be utilized. If one does not work, then another can be tried until the solution is found.

P2 identified the problem and solution relationship as a means for bettering classroom instruction. P2 noted,

When I am having a difficulty, for example, with students grasping a concept, the professional learning community is helpful because I am able to talk to other teachers and get my hands-on lessons, strategies, materials, and assessments that I know would be great to use in my own room.
New members to CMS also adapted to the problem and solution structure that was in place at this location. P4 discussed the way in which new teachers became enmeshed in this practice. P4 said,

We have what you call a Spartan Showcase. There is a clear focus. This can be a unit, a specific area that is part of the unit, or it could be one lesson. One team presents, and other teachers critique the process. This is helpful because the instructional practices are displayed and if there are problems with a specific aspect of the instruction, one’s peers provide valuable feedback.

High expectations for all learners. Based on the responses from the interviews, it became apparent that teachers at Collaborative Middle School hold the mindset that all students are capable of reaching success. P3 commented, “We always want to find better ways to teach concepts because we expect great things from our kids.”

P5 referenced the mastery data when explaining that the goal is always for students to improve as the year progresses. P5 said, “We want that data to continue to show growth; this is the evidence that the students are actually understanding the concepts and are able to show it on paper.” P1 explained:

The entire inquiry cycle is proof that there are high expectations for all students. We constantly meet and revise and change the curriculum and the lesson plans because we want to implement structures that are going to allow students to continue to improve and achieve and not just be stuck at one specific level.

Shared workload and accountability. The professional learning teams at Collaborative Middle School were invested in sharing the tasks involved in the inquiry cycle. As such, every individual who was a PLC member was responsible for adhering to
the team norms of sharing student work and analyzing the work product collaboratively. Team members were also responsible for providing feedback during intervisitations, as well as tasked with showcasing the work that was being done in their respective classrooms. These duties are a means by which staff members understood the importance of being accountable to the team.

P2 mentioned,

Working together and sharing the findings in inquiry is a great thing. In this way, you don’t feel as if you are doing it all alone. Each person contributes to analyzing student work, for example. This is good for strengthening teacher buy-in.

P1 explained,

When we have units and common assessments that we have created, it makes the work so much easier. One person does not have to do everything all alone. So, preparation for the meetings is a great thing because then we can begin right away.

**Questionnaire data findings and analysis – Collaborative Middle School.**

Data was also gathered from the Professional Learning Community Assessment-Revised (PLCA -R) questionnaire. The staff members who participated at CMS were as follows: three teachers, two assistant principals, two paraprofessionals. The questionnaire allowed participants to provide their perceptions of the principal, staff, and stakeholders based on six dimensions related to the professional learning community. The responses from the questionnaire were totaled, and the findings were scrutinized to ascertain the extent to which the responses aligned with the research question. The dimensions with the largest
number of agrees and strongly agrees were evidence of effective PLC practices while the dimensions with the most disagrees and strongly disagrees indicated specific PLC elements that need to be revamped and improved. Individual questionnaire responses were also examined to determine the strengths and weaknesses of practices at Collaborative Middle School that aid in sustaining or hampering professional learning at CMS. The responses also revealed the category of professional learning community development to which CMS belonged. The stages are non-demonstration (no evidence of recognizable PLC practices), (initiating (beginning stages), implementing (doing stage), or institutionalizing (stage of sustainability). Table 4.17 highlights the PLCA-R results from CMS.

Table 4.17

*PLCA-R Results from Collaborative MS*

<table>
<thead>
<tr>
<th>Dimensions of PLCs</th>
<th>Total Responses to Statements under each Dimension</th>
<th>Total Agree/Strongly Agree (%) # equates to the number of responses in each category</th>
<th>Total Disagree/Strongly Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared and Supportive Leadership</td>
<td>77</td>
<td>76 (99%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Collective Learning &amp; Application</td>
<td>70</td>
<td>67 (96%)</td>
<td>3 (4%)</td>
</tr>
<tr>
<td>Shared Values and Vision</td>
<td>63</td>
<td>54 (86%)</td>
<td>9 (14%)</td>
</tr>
<tr>
<td>Supportive Conditions - Structures</td>
<td>70</td>
<td>62 (89%)</td>
<td>8 (11%)</td>
</tr>
<tr>
<td>Supportive Conditions – Relationships</td>
<td>35</td>
<td>32 (91%)</td>
<td>3 (9%)</td>
</tr>
<tr>
<td>Shared Personal Practice</td>
<td>49</td>
<td>46 (94%)</td>
<td>3 (6%)</td>
</tr>
</tbody>
</table>
Analysis of the six PLC dimensions at Collaborative Middle School. Based on the responses from the questionnaire, Collaborative Middle School was functioning at the institutionalization stage. The overall average for each of the six dimensions was 93%. In each of the six dimensions, CMS’ averages were between 85% and 100%, which is indicative of the institutionalization range. This was the greatest level of PLC operation; it indicates that the PLC was effective and functioning at an enhanced level of sustainability. Table 4.18 delineates elements of dimension 1 at Collaborative MS.

Table 4.18

<table>
<thead>
<tr>
<th>Shared and Supportive Leadership Dimension 1 – Collaborative MS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared and Supportive Leadership Statements</strong></td>
</tr>
<tr>
<td>1. Staff members are consistently involved in discussing and making decisions about most school issues.</td>
</tr>
<tr>
<td>2. The principal incorporates advice from staff members to make decisions.</td>
</tr>
<tr>
<td>3. Staff members have accessibility to key information.</td>
</tr>
<tr>
<td>4. The principal is proactive and addresses areas where support is needed.</td>
</tr>
<tr>
<td>5. Opportunities are provided for staff members to initiate change.</td>
</tr>
<tr>
<td>6. The principal shares responsibility and rewards for innovative actions.</td>
</tr>
<tr>
<td>7. The principal participates democratically with sharing power and authority.</td>
</tr>
<tr>
<td>8. Leadership is promoted and nurtured among staff members.</td>
</tr>
<tr>
<td>9. Decision making takes place through committees and communication across grade and subject areas.</td>
</tr>
<tr>
<td>10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
</tr>
<tr>
<td>11. Staff members use multiple sources of data to make decisions about teaching and learning.</td>
</tr>
<tr>
<td><strong>Totals for each category</strong></td>
</tr>
</tbody>
</table>
**Dimension 1 is the concept of shared and supportive leadership.** This dimension relates to practices in which school administrators willingly share decision-making power with staff members. A professional learning community that promotes collegiality also requires school leaders to provide continuous support to staff members. The role and influence of the principal with regard to supportive leadership is one of the most significant factors in the success or failure of a PLC.

Based on Figure 3.1, Collaborative Middle School is functioning at the institutionalization stage. Virtually all (99%) of the participants responded favorably to questions related to shared and supportive leadership. This highlighted a culture in which the leadership shared power and decision-making ability with other staff members. The culture at Collaborative Middle School was one in which the traditional hierarchical structure was non-existent and one in which the leadership recognized the valuable contribution that all employees can make to the school community.

The responses of staff members to statements in this dimension highlighted a definitive culture of shared and supportive leadership. There were 76 positive responses from members of Collaborative Middle School who either agreed or strongly agreed with the statements included in this dimension. On the contrary, one respondent strongly disagreed with statement 11 that related to staff members using multiple data sources to make decisions related to teaching and learning. Based on Table 4.19, 100% of the participants selected “strongly agreed” with statements 2, 4, and 8. These statements emphasized that the principal was supportive in the following ways: incorporating advice from staff members when making decisions, being proactive rather than reactive when
addressing challenges within the school community and promoting leadership amongst the staff.

**Dimension 2 is the concept of shared values and vision.** This dimension highlights the idea that members of the professional learning community have created a common understanding of the direction that the school will take in the near future. Schools that utilize the PLC model often have similar visions. These include a culture of high expectations, a focus on student learning, and a commitment to improving instructional practice.

Of the participants, 86% indicated that there were shared values and a vision at Collaborative Middle School. The vision, they posited, based on questionnaire responses, supports behavioral norms and provides direction for teaching and learning across CMS’s classrooms. The relationships amongst staff members was one of open communication and trust; these principles allowed for the values and vision to permeate the organization. More than half of the staff concluded that staff members were guided by a set of shared values that guide the professional behaviors of the teams at Collaborative Middle School. The belief that the school vision is focused on improvement and student learning was another revelation based on the questionnaire results. Of the responses, 54 were affirmative while nine responses demonstrated that respondents did not believe that various components of the collective learning and application were present at CMS. Table 4.19 provides results for dimension 2 at CMS.
<table>
<thead>
<tr>
<th>Shared Values and Vision Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. A collaborative process exists for developing a shared sense of values among staff.</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>13. Shared values support norms of behavior that guide decisions about teaching and learning.</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>14. Staff members share visions for school improvement that have undeviating focus on student learning.</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>15. Decisions are made in alignment with the school’s values and vision.</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>16. A collaboration process exists for developing a shared vision among staff.</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>17. School goals focus on student learning beyond test scores and grades.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>18. Policies and programs are aligned to the school’s vision.</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>19. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>20. Data are used to prioritize actions to reach a shared vision.</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>9</td>
<td>0</td>
<td>12</td>
<td>42</td>
</tr>
</tbody>
</table>
**Dimension 3 focuses on the concept of collective learning and application.** The dimension of collective learning is one that requires the formation of collaborative relationships to effect change within the school community. See Table 4.20 for results.

Table 4.20

**Collective Learning and Application Dimension 3 – Collaborative MS**

<table>
<thead>
<tr>
<th>Collective Learning and Application Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Staff members work together to seek knowledge, skills, and strategies and apply this new learning to their work.</td>
<td>0</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>22. Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
<td>0</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>23. Staff members plan and work together to search for solutions to address diverse student needs.</td>
<td>0</td>
<td></td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>24. A variety of opportunities and structures exist for collective learning through open dialogue.</td>
<td>0</td>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>25. Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
<td>0</td>
<td></td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>26. Professional development focuses on teaching and learning.</td>
<td>0</td>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>27. School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
<td>0</td>
<td></td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>28. School staff members are committed to programs that enhance learning.</td>
<td>1</td>
<td></td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>29. Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
<td>1</td>
<td></td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>30. Staff members collaboratively analyze student work to improve learning.</td>
<td>1</td>
<td></td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>3</td>
<td>0</td>
<td>9</td>
<td>58</td>
</tr>
</tbody>
</table>
In dimension 3, school members regularly work together to improve their knowledge base and skills. This learning is then applied to areas such as lesson planning and curriculum development and refinement. Of the respondents, 96% indicated that collaboration existed amongst all levels of school staff within the professional learning community. This percentage placed Collaborative Middle School in the institutionalization stage in this domain. Based on this categorization, this school setting has clear collaborative structures that are embedded in the everyday workings of the professional learning community. The relationships amongst the staff members and students were strong and positive. The staff at Collaborative Middle School worked together to closely examine relevant issues that were related to the students in the school community. Together, the CMS staff learned new skills and acquired knowledge that was then directly applied to resolving challenges that arose and enhancing learning opportunities.

According to Table 4.21, respondents responded positively 67 times to the statements that were measured within the dimension of collective learning and application. Of the responses, 58 were in the strongly agree category while strongly disagree was chosen three times. These numbers suggest that the Collaborative Middle School staff regularly partnered to engage in professional dialogue, participated in professional development that enhances teaching and learning, reflected frequently on ways in which to improve students’ academic performance, and applied new knowledge to correct problems that arose.

**Dimension 4 is the concept of shared personal practice.** This dimension necessitates that teachers collaborate and share best practices to serve as a catalyst for
innovation and improvement. The practices that are often the focus of this dimension are peer observations, coaching and mentoring, and intervisitations. Fostering a culture of shared practice results in mutual respect, trust, and the development of solid professional relationships. Table 4.21 shares the results for dimension 4 at CMS.

Table 4.21

*Shared Personal Practice Dimension 4 – Collaborative MS*

<table>
<thead>
<tr>
<th>Shared Personal Practice Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>32. Staff members provide feedback to peers related to instructional practices.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>33. Staff members informally share ideas and suggestions for improving student learning.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>34. Staff members collaboratively review student work to share and improve instructional practices.</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>35. Opportunities exist for coaching and mentoring.</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>36. Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>37. Staff members regularly share student work to guide overall school improvement.</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>3</td>
<td>0</td>
<td>7</td>
<td>39</td>
</tr>
</tbody>
</table>

Of the respondents, 94% indicated that there were shared personal practices that were the driving force behind the PLC at Collaborative Middle School. This dimension involves creating a caring culture that is characterized by mutual respect and trust. This
in turn fosters an environment at Collaborative Middle School in which personal connections are strengthened and relational challenges can be overcome. The shared personal practice dimension is synonymous with the institutionalization stage of PLC development. The hallmarks of this dimension within this stage are a culture of feedback and encouragement, peer-to-peer feedback, and collaboration to review student work.

In this dimension 46 of the responses were either agree or strongly agree compared to three strongly disagree replies. For statements 31, 32, and 33, 86% of the respondents strongly agreed that the practices aligned with each of these items were present at Collaborative Middle School. These structures included the observations of peers and subsequent feedback as well as the sharing of ideas and suggestions for bolstering student learning. Additionally, all of the participants believed that team members were able to apply the learning and share the results of their practice. Four participants selected strongly agree when asked if there were opportunities for mentoring and coaching at this study site.

**Dimension 5 is the concept of supportive conditions – relationships.** This realm relates to members of the professional learning community forming strong relationships that often result in sustained change. Some of the structural conditions that are commonly nurtured in the PLC are necessary for an effective learning community including proximity of teachers to one another, the use of time, and staff development policies. The existence of supportive relationships is important for sustaining continuous growth. Table 4.22 provides the results relating to dimension 5 for CMS.
Table 4.22

*Supportive Conditions (Relationships) Dimension 5 - Collaborative MS*

<table>
<thead>
<tr>
<th>Supportive Conditions – Structures Statements</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>38. Caring relationships exist among staff and students that are built on trust and respect.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>39. A culture of trust and respect exists for taking risks.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>40. Outstanding achievement is recognized and celebrated regularly in our school.</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>41. School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>42. Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

Totals for each category: 3, 0, 7, 25

Supportive relationships in the professional learning community are an essential part of the model’s effective functioning. Collaboration and collegiality are instrumental to the exchange of ideas and the sharing of best practices in an environment in which members are vested in giving as well as receiving feedback related to their practice. Of the participants who completed the questionnaire, 91% responded favorably to questions that measured this PLC dimension. This figure shows that CMS is in the institutionalization stage for this dimension.
Participants did not select strongly disagree nor disagree for any of the items in this section. This indicated that participants believed that there are supportive relationships at CMS. Five of seven participants selected strongly agree for the statement, “a culture of trust and respect exists for taking risks”. This means that the staff at Collaborative was willing to experiment to find structures and procedures that were beneficial and impactful on the community at large.

*Dimension 6 is the concept of supportive conditions – structures.* Dimension 6 requires structures to be developed as a means for strengthening the practices of the learning community. The school leader must provide time for staff to meet, establish clear communication protocols, and reduce isolation. Providing a caring and supportive environment for staff will result in greater opportunities for improving student learning. Table 4.23 provides the results for this dimension at CMS.

Supportive conditions, as they relate to structures that are in place, ensure that the professional learning community is successful. Of the respondents, 89% believed that this aspect of the PLC was present on a regular basis. Based on this percentage, Collaborative Middle School is at the institutionalization stage as it relates to supportive conditions – structures. At this stage, there is a unified effort to embed long lasting change. Dimension 6 ensures that positive, caring, and trusting relationships are developed at Collaborative Middle School.
Table 4.23

Supportive Conditions – (Structures) Dimension 6 – Collaborative MS

<table>
<thead>
<tr>
<th>Supportive Conditions – Relationships Statements</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>43. Time is provided to facilitate collaborative work.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>44. The school schedule promotes collective learning and shared practice.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>45. Fiscal resources are available for professional development.</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>46. Appropriate technology and instructional materials are available to staff.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>47. Resource people provide expertise and support for continuous learning</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>48. The school facility is clean, attractive, and inviting.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>49. The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>50. Communication systems promote a flow of information among staff members.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>51. Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>52. Data are organized and made available to provide easy access to staff members.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>67</td>
</tr>
</tbody>
</table>
There were five statements in the category of supportive conditions – structures. There were 32 agree and strongly agree selections made by participants. All respondents selected strongly agree for the statement, “caring relationships exist among staff and students that are built on trust and respect.” This indicated that staff members had a genuine concern for each other and were polite and respectful to one another. This enabled the staff to carry out the responsibilities associated with Collaborative Middle School’s professional learning community. There were only three statements for which respondents selected strongly agree. A disagree response was not selected at all for this particular dimension. In total, 68 participant responses were either agree or strongly agree. Therefore, it can be inferred that this dimension was deeply enmeshed in Collaborative Middle School’s culture.

**Questionnaires informed research question 1.** The initial research question was focused on participants’ perceptions of the impact that the learning community had on their learning and the instructional practices that were utilized at Collaborative Middle School. The dimensions that are related to this focus are supportive conditions – relationships and shared and supportive leadership. These two areas are vitally important to PLCs that are successful. Within the realm of shared and supportive leadership, staff members are more apt to be invested in the PLC and its goals and objectives if they are directly involved in making decisions about the direction of the PLC. All of the participants responded favorably to statement 2 – “the principal incorporates advice from staff members to make decisions.” All of the respondents (100%) also strongly agreed with statement 8 – “leadership is promoted and nurtured among staff members.” Moreover, the statement, “opportunities are provided for staff members to initiate
change,” yielded the following results – 71% of the participants strongly agreed, and 29%
agreed. There are 11 statements in this dimension. Of these statements, only one
participant strongly disagreed. P5 does not believe that, “Staff members use multiple
sources of data to make decisions about teaching and learning.” Overall, the staff
responses divulged that there was a strong culture of teacher empowerment and shared
leadership at Collaborative Middle School.

**Questionnaires informed research question 2.** Research question 2 centered
more on student achievement, the academic environment, and teacher pedagogical
decisions. The shared values and vision dimension encompassed items 1-20. These
statements focused on goals for student learning, the school’s values and vision regarding
student success, and teacher decision-making. Of the respondents, 57% strongly agreed
with item 13 – “shared values support norms of behavior that guide decisions about
teaching and learning;” 29% agreed, and 14% strongly disagreed with this statement.
Statement 19 required participants to ascertain whether or not stakeholders were actively
involved in creating high expectations that bolstered student achievement; 71% strongly
agreed, 14% strongly disagreed, and 14% agreed.

**Questionnaires informed research question 3.** Research question 3 examined
participants’ perceptions of the strengths and weaknesses at Collaborative Middle School.
The questionnaires revealed that the strongest dimensions at Collaborative Middle School
were shared personal practice and supportive conditions – structures. With regards to
shared personal practice, four of the seven participants determined that this dimension
was an area of strength. This dimension relates to the following: opportunities for staff
members to observe one another and to receive feedback, the existence of opportunities
for coaching and mentoring, and frequent collaboration amongst staff members to review student work to improve instructional practice. The positive responses highlighted a culture of collaboration and continuous improvement at Collaborative Middle School. In the supportive conditions -structures dimension, four of the respondents selected strongly agree for the 10 statements included in this section. The items included statements such as: “time is provided to facilitate collaborative work,” “the school schedule promotes collective learning and shared practice,” and “communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.” A high rate of favorable responses in this category indicated that there were systems in place to ensure that the members of CMS’ professional learning community were given sufficient time to collaborate, adequate money has been earmarked for PLC activities, solid communication structures were in place, and data were organized and readily available for staff use.

One participant selected strongly disagree for each of the statements numbered 12-20 within the shared values and vision dimension. The questions in this section relate to norms and a single focus on student learning, high expectations, and policies that allow staff members to develop a shared vision for the professional learning community. Two other participants agreed that some of these structures were in place but had not fully taken root at Collaborative Middle School.

**Questionnaires informed research question 4.** Research question 4 focused on PLC practices that facilitate a change in the culture of the school. The dimensions that pertain to this aspect of the professional learning community are collective learning and application and supportive conditions – relationships. The dimension of collective
learning and application is comprised of 10 items. Three of the seven respondents selected strongly agree for each of these statements. A fourth respondent strongly agreed with seven of the 10 statements and strongly disagreed with items 28-30. These final three statements focused on the willingness of the staff of Collaborative Middle School to commit to analyzing data, including student work and dedication to programs that enhanced student learning. The final three participants combined to select strongly agree 21 times and agree nine times. The responses of strongly agree demonstrated that CMS’ staff worked collaboratively and applied strategies that were devised to impact student learning. The area of supportive conditions – relationships also revealed that there were positive changes in the culture of the school as the professional learning community had become more enmeshed in the fiber of Collaborative Middle School. Of 35 total responses, strongly agree was selected 25 times; agree was chosen seven times; disagree was not selected at all, and strongly disagree was chosen three times. Statements including: “School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school,” “a culture of trust exists for taking risks,” and “relationships among staff members support honest and respectful examination of data to enhance teaching and learning received a large number of agree and strongly agree replies. The affirmative responses were indicative of a culture in which change is welcomed.

**Collaborative summary.** Collaborative Middle School’s overall average in the six PLC dimensions was 93%. This percentage indicates that the learning community was at the institutionalization stage of development. The questionnaire revealed that the lowest average of the six dimensions was 86%. This number represents the average of agree and
strongly agree statements selected in the shared values and vision category. The highest number of agree and strongly agree statements were recorded in the shared and supportive leadership category. The average for this dimension was 99%. It is evident from participant responses that a culture of collaboration and collegiality exists at CMS. The relationships amongst staff members were cohesive and positive. Staff members partnered to examine student work, evaluate various types of data, and review instructional practices and teacher methods using systems such as intervisitations. There was a culture of shared and supportive leadership. The principal of Collaborative Middle School regularly involved staff members in the decision-making process.

**PLC Middle School**

This location is a middle school that serves 552 students in grades 6, 7, and 8. The student population is 77% Black, 21% Hispanic, 1% Asian, and 1% White. English language learners account for 3% of the population and students with disabilities comprise 21% of the student body. Eighty six percent of the teaching staff have 3 or more years of experience.

The data collection process included: three teachers, one paraprofessional, one assistant principal, and the principal of PLC Middle School. The interviews were conducted with the three teachers, one assistant principal, and the school’s principal; the questionnaire was completed by the three teachers, one assistant principal, and one paraprofessional.

**Research participants – PLC Middle School.** The research interview participants at PLC Middle School were as follows:
• Participant 1: 10 years of teaching experience (middle school – math), master’s degree.
• Participant 2: 9 years of teaching experience (middle school – ELA), master’s degree.
• Participant 3: 6 years of teaching experience (middle school – ELA), master’s degree.
• Participant 4: 10 years of teaching experience (middle school - ELA), master’s degree.
• Participant 5: 10 years of teaching experience (middle school – ELA), master’s degree.

Data were collected from respondents at PLC Middle School. The interview questions served to highlight significant aspects of this study site’s professional learning community framework and to elicit from participants their perceptions of the impact that the model has on their instruction, student performance, and professional and personal relationships. The researcher then used the data to search for themes and to analyze participants’ transcripts to gain greater insight and meaning into respondents’ perspectives.

**Research question 1.** This research question was designed to solicit participants’ perceptions regarding the impact of the professional learning community on their learning and the pedagogical practices that were employed in the classroom. The respondents’ perspectives revealed four categories related to how the learning communities affect staff members’ practice. These categories were: teacher collaboration, culture, communication, and teacher empowerment. The resulting theme
was collaborative culture. Table 4.24 provides the codes, categories, and themes from research question 1.

Table 4.24

*Codes/Categories/Themes* Research Question 1 – PLC Middle School

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bounce ideas off of other people, make decisions as a team, going through the work together, constantly meeting with other departments, departmental meetings, pair individuals from the same department</td>
<td>1. Teacher Collaboration</td>
<td>Collaborative Culture</td>
</tr>
<tr>
<td>2. Intervisitations, common strategies across classrooms, sharing resources, reflect on practice</td>
<td>2. Culture</td>
<td></td>
</tr>
<tr>
<td>3. Talking about different ideas, having conversations, communicating with other staff members regularly, talking to other teachers, conversations that are transferred into classroom practice</td>
<td>3. Communication</td>
<td></td>
</tr>
<tr>
<td>4. Administration gave us the right to say when we want to meet, select what we meet about, create agendas, teachers walk other teachers through the practice</td>
<td>4. Teacher Empowerment</td>
<td></td>
</tr>
</tbody>
</table>

**Collaborative culture.** The categories that emerged from the interviews displayed that there was a strong culture of collaboration amongst the staff members at PLC Middle...
School. All of the participants detailed positive experiences both amongst staff members as well as between the staff members and the school leader. The responses indicated that the participants were especially appreciative of the opportunity that the PLC provided to learn from their colleagues.

**Teacher collaboration.** Several participants expressed the opinion that collaboration with other teachers was a practice that was beneficial to their own teaching and learning. For example, P2 noted,

I tend to benefit from discussion with other people. Having an opportunity to bounce ideas off of other people or even just debating my personal opinion of a strategy or idea helps me. This can either solidify my idea or change my thinking.

P1 concurred and believed that the team dynamic, “is beneficial and allows ideas to be much more thought out and better developed.” P5 contended, “The collaborative culture creates a great forum for the sharing of ideas, strategies, and thoughts with the team.” Two of the five participants mentioned the impact that professional learning communities had on teacher practice. P4 stated, “The learning community is an opportunity for growth. Teachers are able to learn from one another and the meeting times allows practice to be strengthened.” P3 echoed this thought and reflected, “One of the advantages of participating in the PLC is that teachers can work with others in their department as well as other departments to learn how to better teach and apply specific strategies to individual students.”

**Culture.** When probing questions were posed about the culture that exists at PLC Middle School, members of the team noted that the teams at PLC regularly worked together in a community-based atmosphere. The participants recognized the strengths
and weaknesses of the staff members as an integral component of the culture in that identifying these traits aided in the effective and efficient functioning of the various teams.

Intervisitations were seen as an advantageous process that allowed for the identification of best practices as well as practices that needed to be discontinued. P1 mentioned:

We participate in intervisitations. We go into each other’s classrooms and observe and provide feedback to the teacher who is modeling that day. We take notes on our observations and come together as a whole group and discuss what we have seen. We then create a list of strategies that can be used to combat those particular challenges. We use these practices to then write lessons and subsequently teach concepts related to that skill. We also decide on practices that are not beneficial and eliminate them.

P2 agreed with the assertion that intervisitations are useful. P2 proclaimed, “Intervisitations are used often. They allow good practices to be viewed and then used in other classrooms. Teachers also more adept and self-aware. They can begin to regulate and monitor their own practice.” P5 discussed the peer-to-peer observation practice and noted that, “Visiting one another’s classrooms and analyzing what is taking place creates a common language and provides the opportunity for shared resources to be developed and used across classrooms regardless of subject area.”

**Communication.** In addition to visiting colleagues’ classrooms, respondents also discussed the constant communication that transpired on an almost daily basis. The
learning community at PLC Middle School included discussions focused on instruction, curriculum, student achievement, and research-based best practices.

P2 expounded on the importance of communication amongst every member of the team. P2 explained:

I don’t think that the PLC will allow you to walk in and change practice all at once, but what PLCs allow us to do is to constantly communicate with one another to gain a clear understanding of what is happening in the building and in the classrooms. Then, after these discussions, we make changes over time that are more impactful on student outcomes.

P4 divulged that the communication within the building was not just amongst staff, but also happened within the student body. P4 acknowledged,

Students recognize that there are common practices happening in the classrooms. They are making that connection. You will often hear students have conversations about work in one class that is similar to something else that they have seen or done in another class. This is clear evidence that teachers are communicating. Communication with other staff members definitely happens and is welcomed.

**Teacher empowerment.** A strong commitment to teacher leadership and empowerment is evident at PLC Middle School. The respondents shared that teachers were encouraged to take the lead and that the leadership was one that was distributed, rather than a single individual making all of the decisions.

P1 communicated that,
The administration gives the right to determine when we want to meet, how often, and we also decide the agenda for those meetings. The leadership uses distributive leadership in that way to give us the opportunity to make decisions on our own. P3 explained that the sharing of power between the staff and the administration was rewarding because, “There is greater teacher buy-in if their opinions are valued and they are involved in the process. This is more impactful than simply telling teachers what to do and not providing them with a voice.” Additionally, P5 agreed with this opinion and voiced,

Teachers must be in charge of their own learning. They decide when they will meet and come up with the changes that need to be made. They probably meet too much if you ask me, but this has allowed them to become a real team.

**Research question 2.** This research question assessed respondents’ beliefs around the perceived impact of the learning community at PLC Middle School on teacher instruction and the academic culture. The categories that emerged for this research question were continuous improvement, focus on student learning, and shared vision and goals. The theme that resulted was results-orientation. Table 4.25 provides results.

**Results-oriented.** The professional learning community at PLC Middle School was seemingly results-oriented. The practices, policies, and programs were continually assessed and revamped to ensure that they were effective in meeting the needs of the staff and the student body. Goals were set regularly and revisited to ensure that they were adequate to address the needs of the community and its stakeholders.
Table 4.25

*Codes/Categories/Themes Research Question 2 – PLC Middle School*

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Common planning time, changes to our lessons and curriculum, taking risks, experimentation, goal setting, mentoring, whole staff texts, looking at data</td>
<td>1. Continuous Improvement</td>
<td>Results-Oriented</td>
</tr>
<tr>
<td>2. Celebration of student success, ways to improve student achievement, use of data, attendance, and grades to make decisions, students create academic goals</td>
<td>2. Focus on Student Learning</td>
<td></td>
</tr>
<tr>
<td>3. Teaching not done in isolation, culture of openness, results-oriented, professional development</td>
<td>3. Shared Vision and Goals</td>
<td></td>
</tr>
</tbody>
</table>

*Continuous improvement.* According to results from the interview data, a strong culture of continuous improvement defined the learning community PLC Middle School. Its members demonstrated a sustained commitment to identifying ways to reach mutual goals and achieve their fundamental objectives. First and foremost, the leadership provided members with common planning time. Also, teachers were encouraged to meet often and to constantly utilize data to make changes as needed.

P3 touted the benefits of teachers working together to plan the lessons that would be used in their respective classrooms. P3 declared,

> Common planning time allows teachers to share ideas, discuss instructional challenges, and allow for lesson implementation and reflection over a specific period of time. When the team meets with success, there is also a time to
celebrate, so that members are able to see the growth and celebrate and be willing to go further.

P5 noted that, “Common planning time helps teachers to feel supported and less overwhelmed and helps to establish trust and strong communication to guide improvement.”

P1 discussed risk-taking and experimentation as a means for enhancing the culture of the school as well as the academic environment. P1 expressed:

I can say that in the math department, there is experimentation; we try out different philosophies and try to teach students different ways to solve problems. We sometimes use different graphic organizers or manipulatives to help students grasp specific concepts. Also, hands-on experiments allow for different types of learners to be engaged in the lesson.

P2 voiced that goal setting and mentoring were important aspects of PLC Middle School in that it improved the structure of the learning community. P2 stated,

Goals provide a target and objective that needs to be reached and the activities of the PLC help to make the goal a reality. Mentoring from veteran teachers also allow their colleagues to become stronger and more adept at their craft.

P4 commented on the use of data as a means for improving student achievement. P4 affirmed, “A constant review of data is important because then the team will know where to readjust.”

**Focus on student learning.** A clear and dedicated focus on student learning was a major element of high-quality learning communities. The participant responses highlighted that student learning was a focal point of the improvement efforts at PLC
Middle School. For instance, P3 described the *Making Thinking Visible* strategy that was utilized across subject areas at PLC:

> After we assess student work products, we come up with solutions and strategies that can be used to help individual students. There are charts and question stems that we have developed that are common in the different departments. We also have uniform posters such as one on Making Thinking Visible. We use other methods to increase student achievement such as Socratic circles and Socratic seminars. Even the language that we use promotes student learning, such as, “Show me your thinking.” These practices came out of the learning community that we have here.

P1 noted that there are additional practices that are used that are specifically utilized to increase student achievement. P1 stated,

> Students reflect on specific concepts in written form or in a discussion-based forum. This time also allows them to explain to one another how they arrived at a certain answer. These methods allow students not just to give an answer, but to be able to verbally express how they arrived at it.

**Shared vision and goals.** A notable characteristic of the professional learning community was that the members were unified by a specific set of shared vision and goals. The interview responses suggested that the overarching vision and goals for PLC Middle School were: an environment characterized by collaboration, trust in one’s colleagues, a focus on outcomes, and a firm commitment to continuous teacher training.

P5 stated,
Collaboration is essential for the learning community. The teachers must be willing to merge their practices to better understand what works and what does not work. Working in isolation would not produce the same results. The collaboration allows not just one or two classrooms to improve, but for improvement across the board.

P2 also hailed the collaborative efforts at PLC Middle School. P2 added, “When staff members collaborate, it creates an environment of sharing and dedication to doing what needs to be done to create change. The alternative is isolation which does not create an environment of trust, respect, and mutual success.” P4 noted that a culture of accessibility to the classrooms of all staff members was present at PLC and has become an important part of the vision and values at this site:

> Often people are in one another’s rooms just talking about different aspects of the work. We are definitely encouraged to meet and communicate with one another informally. I see it happening a lot in the math department. For someone who did not know what was happening, it could just look like friends having a conversation, but I think that most teachers are comfortable having other people just pop into their classrooms at PLC, so it does not feel strange. In fact, it is the type of culture that we want to exist at this school.

**Research question 3.** Research question three gauged participants’ perceptions of the strengths and weaknesses of the learning community at PLC Middle School. The respondents specified that there were both advantageous and disadvantageous aspects of PLC’s learning community. The categories that surfaced were teacher support, use of data, and time/scheduling. This resulted in the theme of barriers and facilitators for PLC
There are barriers and facilitators to PLC implementation. The responses for the interviews revealed that participants believe that there are specific structures in place at PLC Middle School which create an ideal environment for participants to: engage in the tasks that are essential for strengthening pedagogy, create a culture of collaboration, collective inquiry, and trust, and reinforce student learning. On the other hand, participants identified time and scheduling as factors that hinder the PLC from functioning adequately.

Table 4.26

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher leader positions, mentoring, meet to ensure that new members understand how things work, open door policy, electronic lessons, Google Drive.</td>
<td>1. Teacher Support</td>
<td>Barriers and Facilitators for PLC Implementation</td>
</tr>
<tr>
<td>2. Break down student work, strategies to improve written pieces, discuss findings, develop plan to improve student achievement.</td>
<td>2. Use of data</td>
<td></td>
</tr>
<tr>
<td>3. Not always enough planning time, scheduling is sometimes an issue, sometimes time does not allow for meetings that you have to be a part of, more time is needed.</td>
<td>3. Time/ Scheduling</td>
<td></td>
</tr>
</tbody>
</table>

*Barriers and facilitators to plc implementation.* The responses for the interviews revealed that participants believe that there are specific structures in place at PLC Middle
School which create an ideal environment for participants to: engage in the tasks that are essential for strengthening pedagogy, create a culture of collaboration, collective inquiry, and trust, and reinforce student learning. On the other hand, participants identified time and scheduling as factors that hinder the PLC from functioning adequately.

**Teacher support.** Participants discussed teacher support as an area of strength at PLC Middle School. They indicated that there was sufficient assistance available from both the administration as well from their colleagues. This support, according to the data that was collected, allowed the members of the learning community to hone their instructional ability, develop lessons to remedy student challenges, and create an environment of respect and mutuality.

P4 noted that the administration at PLC Middle School was extremely supportive and encouraging. P4 mentioned, “We have always had a policy that is unspoken that whatever a teacher would like to try, teach, or do, it will be supported 100%.” P2 noted, None of the things that we have implemented as a result of the PLC are things where several team members are already experts. We just recognize that there is an area of need and then together we work as a team to try and find the solution to the issue at hand. The collaboration definitely makes a difference.

P3 discussed the systems that are used to acclimate new teachers to the learning community at PLC. P3 asserted:

When there is a new member, we meet more often to make sure that the new team member gains an understanding of how things work. We do have a set curriculum and curriculum map that is given to them at the beginning of the year as a guide for what needs to be taught. The units are also provided at the
beginning of the year so that they know what has to be done at specific points throughout the school year.

P1 further emphasized that new teachers are supported from the very first day that they enter the school building. P1 stressed,

From the very first day, we have an open-door policy with new staff. They are able to stop by the rooms of other teachers to get advice and to see lessons being taught. In the math department, they are given a pacing calendar and they are also given the lessons electronically for the year.

**Use of data.** Data analysis is at the center of PLC’s learning community. Staff members used multiple forms of data to ascertain the current levels of students. Data were constantly assessed to identify student strengths and weaknesses as well as to evaluate whether growth has been made as the school year progresses. P5 expressed that data analysis was at the crux of every PLC meeting. P5 described the types of analysis that the learning teams engaged in and stated:

Data analysis is part of the PLC cycles, and it also became one of the requirements of our PD sessions - that we bring in work. So, if I know that they are going into department meetings, I will have them bring exams to examine what they were asking students, how students were answering those questions, what were the skill sets needed being that those teams are vertical, were they taught those things in middle school in other grades, to understand what they did before to see if we are staying in alignment with what we are trying to accomplish based on the kids’ learning objectives. We look at the learning objectives to see if we are asking for the right things from students and how to better inform them of
how to prepare for questions on the Regents’ exam or state exam without necessarily breaking into test prep all of the time. Are the kids using the vocabulary correctly? That is when I go into classrooms, and if I am in a math room, I want to hear math vocabulary – that kids are using those expressions that they are supposed to use, whether I know them or not, I would like to hear them.

P1 discussed the process that is used for data analysis.

We take a look at the work that the students complete. We want to know if the students are actually understanding the concept. Based on the results, a plan of action is created – either to target a specific difficulty or to challenge students who got it.

P3 also mentioned the inquiry cycle and how students, not solely teachers or staff are involved in data assessment. P3 affirmed:

We evaluate the work of the students throughout the different PLCs. We identify the students’ strengths and weaknesses. This is done so that the teaching staff can better meet the needs of the students. Next, we work with students to create goals around their personal aspirations as well as their academic goals. We hope that the personal goals support the academic goals.

**Time/scheduling.** Three of the five participants identified time and scheduling as an obstacle to the effective functioning of the learning community at PLC Middle School. The absence of sufficient time as well as scheduling conflicts that did not always allow all participants to meet when required were two of the hindrances that were highlighted by the interview responses. P3 declared,
Scheduling is sometimes an issue, so we don’t always have enough common planning time. Sometimes, the time does not allow for all of the meetings that you have to be a part of. It is sometimes hard to be a part of an ELA meeting, a social studies meeting, and a whole school meeting. Because each of these has a different set of challenges, it is difficult to keep up with everything.

P1 noted,

Sometimes teachers do not have enough time to prep for the learning community meetings. Sometimes, teachers are told to come to me when they are having problems with behavior management, for example. Then, my focus is on helping with that and not on the things that I need to actually complete for the classroom related to inquiry.

P4 voiced,

There is often a lack of time to complete everything that needs to be done. I think that this could be fixed if there was more money because then the principal could pay staff members to participate. But, when the money’s not there, there is still not enough time to complete what needs to be done.

**Research question 4.** This research question pertains to the impact of the professional learning community on the culture of PLC Middle School. Culture is one of the chief determinants of staff dedication, motivation, and productivity. The categories that materialized from this research question were: shared resources, willingness to try new ideas, and shared workload/accountability. The overall theme that resulted was culture of collective responsibility. Table 4.27 provides information relating to the codes, categories and themes for research question 4 at PLC Middle School.
Table 4.27
 Codes/Categories/Themes Research Question 4 – PLC Middle School

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Common graphic organizers, exit tickets, and rubrics; schoolwide assessments, list of interventions for identified challenges</td>
<td>1. Shared Resources</td>
<td>1. Shared Resources</td>
</tr>
<tr>
<td>2. Experimentation, try new things, open to new ideas, new ways for doing things, not afraid to take a risk</td>
<td>2. Willingness to Try New Ideas</td>
<td>2. Willingness to Try New Ideas</td>
</tr>
<tr>
<td>3. Group sharing data, group ownership, whole-group issues, create units and common interdisciplinary lessons, work together to modify lessons and instruction</td>
<td>3. Shared Workload/Accountability</td>
<td>3. Shared Workload/Accountibility</td>
</tr>
</tbody>
</table>

**Culture of collective responsibility.** The concept of collective responsibility is the shared understanding that each member of the professional learning community is tasked with the responsibility of being engaged in exploration, experimentation, and action for the sole purpose of positively impacting student learning and enhancing teacher pedagogy and instruction.

**Shared resources.** Teachers at PLC Middle School reported that sharing resources was a regular practice that allows teachers to create a collaborative, inclusive, and growth-promoting culture designed to strengthen professional and student learning.

P4 noted that teachers at PLC share resources including: graphic organizers, exit tickets, and rubrics. P4 stated that the PLC, “provides a common starting point for teachers to utilize similar materials to meet the needs of diverse student learners.”

P5 noted:
Common assessments such as the “Degrees of Reading Power” allows teachers to use the same method of evaluation to better understand each student’s current level of functioning. Because the students all complete the same assessment, the strategies for improvement that are identified can also be similar across classrooms. Patterns in student misconceptions and mistakes can also be identified. Once this is done, targeted interventions can then be employed to aid students who need additional assistance.

**Willingness to try new ideas.** The willingness to take risks and experiment is a significant aspect of a high – functioning PLC. A culture of continuous improvement necessitates that learning community members be willing to try new approaches. The staff members at PLC Middle School demonstrated a willingness to attempt brand new strategies and methods for teaching within the classroom environment.

P2 reflected on the leadership’s readiness to test new concepts and methods. P2 disclosed,

I feel as though at PLC Middle School, I have never been told no when I want to try something new, even if it sounds crazy. I think that this is important because teachers can attempt new things. You actually have to use trial and error to see what works and what doesn’t work.

P4 divulged that the school culture was one that followed the creed, “If it good for the kids and good for you, then it is what you should do. This is beneficial because you do not have to feel as though you are locked into using any specific strategy or method, but rather we, as the staff are free to do what works best for us and for our students.
P5 reiterated a similar thought to P4. P5 communicated:

Our teachers try everything. We do everything that we think will support student results. Lucy West mathematics, Math Metamorphosis, we did that as well. Me reaching out to certain staff members to lead certain PDs around the work that they were doing to get more teachers involved in trying different things. It wasn’t so much the leader saying that this is going to work. It is now their colleagues saying, I tried this, and this is working, and this is what we are doing. Bringing in video clips of what’s happening, getting authentic student conversations usually coming from a video that they got online to look at the stuff that is happening in the building. That was definitely helpful. So, if it works, we are willing to attempt it.

**Shared workload/accountability.** Shared workload and accountability was identified as being important to the staff. At PLC Middle School, each staff member was valued, and the expectation was that all members will actively contribute to the learning community. P1 affirmed, “The learning community at PLC is not an individual endeavor; it is a shared work that requires every member to work cooperatively. Norms help to keep everyone accountable.” P3 explained,

The responsibilities are divided. For example, if there is student work to be brought to a meeting, the expectation is that the protocol will be completed ahead of time so that the conversation about the analysis can take place during the meeting.

P2 expressed that,
Sharing the workload is a good thing because it prevents staff members from feeling burned out and overwhelmed. The lessons and units are important to the entire team. Therefore, they are not created in isolation. We decide together which standards and strategies should be included based on the results of assessments or student work products.

**Questionnaire data findings and analysis – PLC Middle School.** Additional data were gathered through the use of the Professional Learning Community Assessment – Revised questionnaire. The participants included: three teachers, one assistant principal, and one paraprofessional who has served in the role for 3 years. The questionnaire allowed respondents to read a series of 52 statements in six unique dimensions. The options of strongly agree, agree, strongly disagree, and disagree were given to participants. The dimensions with a higher number of strongly agrees and disagrees indicated that these conditions were present at PLC Middle School. Additionally, participant responses highlighted the stage of PLC implementation that this school location ranks in each of the six dimensions.

**Analysis of the six PLC dimensions at PLC Middle School.** The questionnaire responses indicated that PLC Middle School was operating at the institutionalization stage. The average for the six dimensions was 98%. The range for the institutionalization stage was 85-100%. The institutionalization state is characterized by: an emphasis on affecting change in the school’s structures, the widespread use of data, and a culture of experimentation and risk-taking. Table 4.28 documents the percentages of participants’ responses in each of the six dimensions. The average for each dimension was greater than 95%. This provides valuable insight into the learning communities at PLC Middle School. Staff members perceived the learning communities to be stable, sustainable, and effective.
Table 4.28

PLCA-R Results from PLC Middle School

<table>
<thead>
<tr>
<th>Dimensions of PLCs</th>
<th>Total Responses to Statements under each Dimension</th>
<th>Total Agree/Strongly Agree (%) # equates to the number of responses in each category</th>
<th>Total Disagree/Strongly Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared and Supportive Leadership</td>
<td>55</td>
<td>53 (96%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Collective Learning &amp; Application</td>
<td>50</td>
<td>49 (98%)</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Shared Values and Vision</td>
<td>45</td>
<td>45 (100%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Supportive Conditions - Structures</td>
<td>50</td>
<td>50 (100%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Supportive Conditions – Relationships</td>
<td>25</td>
<td>24 (96%)</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>Shared Personal Practice</td>
<td>35</td>
<td>35 (100%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

Based on Figure 3.1, PLC Middle School was operating in the institutionalization stage of PLC development; 96% of participants responded favorably to items within this dimension. This percentage placed PLC Middle School in the institutionalization range for this dimension. This is synonymous with a culture in which the administration offers supports and structures for PLC staff to carry out the responsibilities associated with the

175
professional leaning community. The site was also one in which the school leader often expanded the decision-making process to other members of the school community.

**Dimension 1 highlights shared and supportive leadership.** The dimension of shared and supportive leadership necessitates that administrators partner with teachers to identify solutions that lead to school improvement. This realm is most successful when school leaders willingly engage in collective dialogue and shared decision-making alongside staff members. When this occurs, the staff is able to grow professionally in an environment of collaboration to achieve the organization’s vision.

Table 4.29 provides responses relating to dimension 1, shared and supported leadership. Table 4.29 reveals that in the shared and supportive leadership dimension, disagree was selected only once. Strongly disagree was not chosen in this section by any of the participants. Agree was selected 18 times in this dimension while strongly disagree was chosen 35 times. These numbers disclose that participants saw evidence of shared and supportive leadership practices at PLC Middle School. Four of five participants selected strongly agree in reference to the statement, “staff members are consistently involved in discussing and making decisions about most school issues.” Additionally, 80% of respondents suggested that staff members are provided with opportunities to create change.

More than half of the participants agreed or strongly agreed with the assertion, “leadership is promoted and nurtured among staff members.” Moreover, all study participants indicated that decisions were made through committees that incorporated staff from various grade levels and subject areas and that multiple sources of data were utilized when making decisions related to teaching and learning. The replies related to
shared and supportive leadership highlight a school culture in which the principal willingly shares the decision-making authority. The school leader supported the staff and empowered them to exercise shared responsibility for organizational success, and effectively shared data with staff that impacts student achievement.

Table 4.29

*Shared and Supportive Leadership Dimension 1 – PLC Middle School*

<table>
<thead>
<tr>
<th>Shared and Supportive Leadership Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Staff members are consistently involved in discussing and making decisions about most school issues.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2. The principal incorporates advice from staff members to make decisions.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>3. Staff members have accessibility to key information.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. The principal is proactive and addresses areas where support is needed.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Opportunities are provided for staff members to initiate change.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>6. The principal shares responsibility and rewards for innovative actions.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. The principal participates democratically with sharing power and authority.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>8. Leadership is promoted and nurtured among staff members.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>9. Decision making takes place through committees and communication across grade and subject areas.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>11. Staff members use multiple sources of data to make decisions about teaching and learning.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>0</td>
<td>1</td>
<td>18</td>
<td>35</td>
</tr>
</tbody>
</table>
**Dimension 2 focuses on shared values and vision.** The shared values and vision dimension is a vital component of effective learning community practice. The values that are created produce various norms that guide the actions of staff and lead to greater staff engagement and commitment. One of the fundamental attributes of a successful PLC’s vision is an unwavering commitment to improvement in student achievement.

The questionnaire responses for this dimension revealed that 100% of the participants were of the belief that there was a shared vision and common values that permeated the cultural fabric off PLC Middle School. One of the primary characteristics of this site’s PLC was a strong focus on student achievement. The school is in the institutionalization stage in this dimension, which suggests that this practice was firmly embedded in the school wide practices. Table 4.30 highlights responses relating to dimension 2 at PLC Middle School.

In the shared values and vision dimension, there were no participants who selected strongly disagree or disagree for any of the statements in this category. The statements with the greatest number of strongly agree responses were 15, 16, 17, and 18. In each of these four statements, there were three strongly agree responses and two agree responses. Statement 15 revealed that participants maintained that the decisions that were made were based on the school’s values and vision. The responses to statement 16 communicated that there was a collaborative process by which a shared vision amongst staff was developed. All of the participants responded affirmatively to statements 17 and 18. Respondents asserted that there were policies and programs at PLC Middle School that connected to the school’s vision. Finally, the questionnaire revealed that school goals
were not solely focused on students’ academic achievement, but rather the scope was expanded to look at areas other than test scores and grades.

Table 4.30

*Shared Values and Vision Dimension 2 – PLC Middle School*

<table>
<thead>
<tr>
<th>Shared Values and Vision Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. A collaborative process exists for developing a shared sense of values among staff.</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>13. Shared values support norms of behavior that guide decisions about teaching and learning.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>14. Staff members share visions for school improvement that have undeviating focus on student learning.</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>15. Decisions are made in alignment with the school’s values and vision.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. A collaboration process exists for developing a shared vision among staff</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17. School goals focus on student learning beyond test scores and grades.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. Policies and programs are aligned to the school’s vision.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>20. Data are used to prioritize actions to reach a shared vision.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>20</td>
</tr>
</tbody>
</table>
Dimension 3 focused on collective learning and application. The dimension of collective learning and application requires school staff to collaborate to seek knowledge and apply this learning to the tasks associated with the PLC. In this dimension, teachers examine pedagogy and work to align established policies to the school’s curricular goals. Pedagogues also seek to identify strategies and instructional practices that will result in greater student engagement and learning.

Of the respondents, 98 agreed or strongly agreed with the statements that were contained in this dimension. These responses showcase a school community in which a large number of staff members collaborated to analyze the issues and challenges that impact student achievement. Together, the staff worked to gain knowledge on best practices and sought to hone their instructional skills. They were vested in applying new knowledge and learning to their practice. PLC Middle School was in the institutionalization range of PLC development in the collective learning and application dimension. At this phase, the dimension of collective learning and application has become deeply enmeshed in the culture of the school. There are widespread practices in the school community related to the activities that are fundamental to this dimension.

There are nine statements in the dimension of collective learning and application. According to Table 4.31, there were a total of 50 responses that were garnered from this portion of the questionnaire. There was a single disagree response, 49 positive replies were also tabulated. This illustrates that this dimension was an area of strength for PLC Middle School. Participants reported that collegial relationships were present and staff members collaborated to ensure that improvement efforts are successful.
Table 4.31

*Collective Learning and Application Dimension 3 – PLC Middle School*

<table>
<thead>
<tr>
<th>Collective Learning and Application Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Staff members work together to seek knowledge, skills, and strategies and apply this new learning to their work</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22. Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>23. Staff members plan and work together to search for solutions to address diverse student needs.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>24. A variety of opportunities and structures exist for collective learning through open dialogue.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>25. Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>26. Professional development focuses on teaching and learning.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27. School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>28. School staff members are committed to programs that enhance learning.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>29. Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>30. Staff members collaboratively analyze student work to improve learning.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>0</td>
<td>1</td>
<td>28</td>
<td>21</td>
</tr>
</tbody>
</table>
Statement 21 had the greatest number of individuals who strongly agreed with any statement in this dimension. Three of the five participants expressed a strong agreement to the item that stated, “staff members work together to seek knowledge, skills, and strategies, and apply this new learning to their work.” The two remaining participants agreed with the above statement. Members of the PLC staff also noted that various structures existed that fostered dialogue, enhanced collective learning, and enabled staff to partner in analyzing data to evaluate the effectiveness of teacher instruction. Finally, 100% of the participants agreed or strongly agreed that staff members worked together to assess student work products as a means for enhancing learning.

**Dimension 4 focuses on shared personal practice.** Through shared personal practice, staff members create inquiry-oriented practices that reduce teacher isolation. Staff members engage with one another to develop a culture of mutual respect and trustworthiness. Through the creation of formalized structures, shared personal practices often lead to open dialogue, opened classroom doors, and a culture of support and collegiality. Table 4.32 highlights the responses related to dimension 4.

The participants who completed the questionnaire indicated through their responses that shared personal practices have been developed and are integral to the PLC school community. One hundred percent of the respondents responded positively to statements that assessed the existence of this dimension. The participants cited practices such as intervisitations, collaborative lesson planning, and open classroom doors as evidence of this dimension existing at PLC Middle School. Table 4.32 shows that there
were no strongly disagree or disagree options selected for this dimension. All respondents either agreed or strongly agreed with the statements that were provided.

Table 4.32

*Shared Personal Practice Dimension 4 – PLC Middle School*

<table>
<thead>
<tr>
<th>Shared Personal Practice Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>32. Staff members provide feedback to peers related to instructional practices.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>33. Staff members informally share ideas and suggestions for improving student learning.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>34. Staff members collaboratively review student work to share and improve instructional practices.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>35. Opportunities exist for coaching and mentoring.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>36. Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>37. Staff members regularly share student work to guide overall school improvement.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Totals for each category: 0 0 15 20

Two statements received the largest numbers of strongly agree replies. Four of five participants posited that there were opportunities for coaching and mentoring. Four of the five respondents also indicated that individuals and teams were able to apply and share the skills and concepts that they had learned. Additionally, the statements with the
lowest rates of strongly agree responses were statements 32 and 37. Statement 32 addressed staff members being given the opportunity to supply feedback to their peers regarding instructional practices. Statement 37 required participants to evaluate the extent to which staff members regularly share student work to impact school improvement efforts.

**Dimension 5 was focused on supportive conditions – relationships.** The dimension of supportive conditions in relationships involves the creation of strong interaction and collaboration amongst members of the professional learning community. This dimension involves powerful collegial relationships, norms of continuous critical inquiry, and the allocation of resources to maintain the growth of a community of learners. Table 4.33 highlights the responses related to supportive conditions at PLC.

Respondents concluded that there were a number of supportive relationships at PLC Middle School. In fact, 96% of the questionnaire participants indicated that there were staff members who were able to develop productive relationships as they worked towards a common goal. Table 4.33 documented participant responses to five statements related to the existence of supportive relationships at PLC Middle School. There was a single reply of disagree to the statement, “outstanding achievement is recognized and celebrated regularly in our school.” There were no replies of strongly disagree recorded in this dimension. All of the participants (100%) selected agree for statement 41. This item addressed the degree to which stakeholders and staff are unified in embedding sustained change in the school’s culture. Of the participants, 60% agreed strongly that caring relationships were present amongst staff and students and that there was a culture of trust and respect for experimentation.
Table 4.33

Supportive Conditions – (Relationships) Dimension 5 – PLC Middle School

<table>
<thead>
<tr>
<th>Supportive Conditions – Structures Statements</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>38. Caring relationships exist among staff and students that are built on trust and respect.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>39. A culture of trust and respect exists for taking risks.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>40. Outstanding achievement is recognized and celebrated regularly in our school.</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>41. School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>42. Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>9</td>
</tr>
</tbody>
</table>

**Dimension 6 was supportive conditions – structures.** This dimension involves the identification and implementation of strategies and structures that will support and promote change. Some of the supportive conditions that are required to effect change are sufficient time to carry out PLC-related tasks, common planning time for educators, and adequate communication structures. These mechanisms often result in effective learning communities. Table 4.34 provides responses for dimension 6 for PLC.
Table 4.34

**Supportive Conditions (Structures) Dimension 6 - PLC Middle School**

<table>
<thead>
<tr>
<th>Supportive Conditions – Structures Statements</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>43. Time is provided to facilitate collaborative work.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>44. The school schedule promotes collective learning and shared practice.</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>45. Fiscal resources are available for professional development.</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>46. Appropriate technology and instructional materials are available to staff.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>47. Resource people provide expertise and support for continuous learning</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>48. The school facility is clean, attractive, and inviting.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>49. The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>50. Communication systems promote a flow of information among staff members.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>51. Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>52. Data are organized and made available to provide easy access to staff members.</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Totals for each category</td>
<td>0</td>
<td>0</td>
<td>33</td>
<td>17</td>
</tr>
</tbody>
</table>

All of the participants (100%) agreed with the questionnaire statements that indicated that there were supportive structural conditions in place at PLC Middle School. These structures included: communication systems, time and space to meet, and the
opportunity to examine and reflect on current practice. Neither strongly disagree nor disagree were selected for any of the statements that were included in this dimension. The five respondents each selected agree in response to the statement, “resource people provide expertise and support for continuous learning. The statement with the highest number of strongly agree replies is number 48, which required participants to measure the extent to which, “the school facility is clean, attractive, and inviting.” Additional statements that displayed a high level of participant agreement included: “there is a school schedule that fosters collective and shared learning, technological resources and instructional materials are available to staff,” and “communication systems that promote the flow of information amongst staff members and external stakeholders are utilized.”

Questionnaires informed research question 1. The first research question focused on staff perceptions of the impact that the professional learning community has had on their instructional delivery and capability as well, as the extent to which their learning has increased as a result of regular PLC involvement. The dimensions that are related to this are shared personal practice and supportive conditions – structures. These two dimensions involve a series of statements that are related to teacher learning and instruction. With regard to shared personal practice, all of the participants either agreed or strongly agreed with each of the seven statements in this dimension. Four of the five participants believed that there were opportunities for teaching and learning. Three of the five participants agreed with the statement, “staff members collaboratively review student work to share and improve instructional practices.” Two staff members agreed with this statement. Additionally, when responding to the item, “staff members informally share ideas and suggestions for improving student learning,” three of the respondents strongly
agreed and two participants agreed. Moreover, respondents answered favorably when asked about opportunities for observing their peers.

Additionally, staff members offered encouragement to one another and student work was shared to guide overall school improvement. The supportive conditions – structures dimension involved staff members being given adequate time to meet to carry out the shared work of the PLC. Two participants strongly agreed that there was sufficient time given, while three of the participants agreed with this statement. Furthermore, when asked about the availability of technology and instructional materials, two participants agreed strongly that this was the case at PLC Middle School while three participants agreed with this statement.

Questionnaires informed research question 2. Research question 2 centered on the impact that the learning community at PLC Middle School had on teacher pedagogical practice and the academic terrain. At the heart of these dimensions are a focus on student learning and teacher instruction. Participants did not select strongly disagree or disagree for any of the nine items in the shared values and vision section. In fact, all of the respondents agreed that there was a shared process for developing values and vision amongst the members of the staff. All of the participants indicated that at PLC Middle School, there was an unwavering focus on student learning. Two of the five participants strongly agreed with statement 19, “stakeholders are actively involved in creating high expectations that serve to increase student achievement.” Three of the five respondents agreed.

All participants indicated that there is a culture of commitment to student success that goes beyond test scores and grades. The dimension of collective learning and
application provides valuable insight into the collaborative culture that has been created at PLC Middle School. Three of the five participants acknowledged that staff members worked collectively to seek knowledge that is then applied to their work. The professional development is focused on teaching and learning at this location, according to respondents. Three respondents strongly agreed, and two respondents agreed. The questionnaire responses indicated that there was a strong commitment to teaching and learning and that the structures that are essential for continuous improvement were enmeshed in the school’s everyday culture.

Questionnaires informed research question 3. Research question three focused on the strengths and weaknesses of the professional learning community. The dimension of shared and supportive leadership was interwoven in the professional learning community at PLC Middle School. Participants indicated that the leadership was shared amongst staff members and those in administrative positions. The principal, according to the questionnaire responses, was supportive and incorporated the voices of staff members in the decision-making processes at PLC School. Four of the five participants agreed that the principal involved staff when making decisions. Staff members reported using multiple forms of data to make decisions about teaching and learning and the respondents disclosed that they were provided with the opportunity to initiate change and that they were given access to key and critical information.

Questionnaires informed research question 4. The fourth research question was: What PLC practices facilitate a change in the culture of the school? This research question according to the questionnaire response, aligns with the supportive conditions – relationships. Three of the five participants strongly agreed that strong relationships exist
amongst staff members and the student population that were built on trust and respect. All participants either strongly agreed or agreed that a culture of trust and respect existed for experimentation and taking risks. This is one of the most important aspects of the professional learning community. PLC members must be willing to try new and novel strategies and methods to effect sustained change. Two respondents indicated that relationships exist amongst staff members that drive the examination of data to enhance teaching and learning.

**PLC summary.** The average of the six dimensions at PLC Middle School revealed that the learning community was functioning at the institutionalization stage of PLC establishment. All of the participants at this site either agreed or strongly agreed with all of the statements in the following categories: shared values and vision, supportive conditions – structures, and shared personal practice. This percentage indicates that the staff members had a set of shared values and a clear vision that guided the decision-making process at PLC Middle School. Additionally, structures including the setting aside of adequate resources for professional development, the availability of technology for teacher use, and the communication of essential data and information have aided the school community in advancing its school improvement efforts. Finally, shared personal practices such as intervisitations, coaching and mentoring, and peer-to-peer feedback have resulted in a climate of continuous improvement.

**Summary of Findings**

Chapter 4 presented the research questions that guided this qualitative multiple case study. Additionally, it presented the data that was gathered by the researcher through semi-structured interviews and the Professional Learning Community Revised
questionnaire. The participants furnished extensive and meaningful descriptions of their experiences as members of their respective school’s professional learning community. The three school sites were: Mapleville Middle School, Collaborative Middle School, and PLC Middle School. According to the findings, the PLC was positively impacting the culture and academic environment at all of the study locations. The open coding process yielded a substantial amount of data which aligned with staff perceptions related to their personal and professional experiences. The findings that resulted from the interviews and the questionnaires revealed participants’ beliefs about the impact that participation in the learning community had on the academic environment, instructional practices, and school culture. The categories that emerged from the coding process at each of the respective schools were aligned with three research questions. The findings that emerged from the research questions related to attributes that are inherent to professional learning communities that are effective and sustainable.

**Mapleville Middle School.** The findings at Mapleville revealed that staff members believed that the PLC significantly impacted their learning and their ability to utilize effective teaching practices. Within the theme of collegial relationships, teacher support, teacher collaboration, culture, and administrator support were identified as the relevant categories.

Findings revealed that the professional learning community at Mapleville Middle School positively impacted pedagogy and the academic environment. The categories that emerged in relation to research question 2 are not arranged by order of importance. The categories were: focus on student learning, data-driven decision making, and intervisitations. These informed the theme of results orientation that developed.
The instructional staff at MMS assessed the strengths and weaknesses of the PLC that was in operation at Mapleville Middle School. The findings for research question 3 revealed three categories that related to participants’ perceptions of the positive and negative aspects of the PLC model. The categories that emerged were time and structure, type of meeting/group, and shared and supportive leadership. These led to the formulation of the theme - barriers and benefits of PLC implementation.

The findings that were made concerning research question 4, resulted from participants’ perceptions regarding the PLC practices that facilitate change in the school’s culture. The findings revealed that participants referred to three major categories related to the PLC practices that impact the culture at Mapleville. These categories were structures, common assessments, and continuous revisions of units and lessons. The resulting theme was shared personal practice.

The findings that resulted from participants’ responses indicated that support from both colleagues and school leaders was vital to teacher improvement in instruction, assessment, and curriculum development. The participant responses revealed that shared leadership positively impacted staff members’ sense of trust and commitment to the school’s values and vision. A professional learning community that is able to effect change, participants revealed, is one in which common practices are shared amongst the school community.

**Collaborative Middle School.** The findings at Collaborative Middle School revealed that school staff perceived that the PLC has had a positive effect on their knowledge base and has improved the instructional climate. The categories that resulted were teacher collaboration, professional development, teacher empowerment, and
intervisitation. The themes that were formulated from these categories was teacher
support.

The findings highlighted the fact that staff members affirmed that the PLC framework
at Collaborative Middle School has impacted instruction and the academic domain. The
three categories that emerged were student growth, mindset of continuous improvement,
and shared vision and goals. These categories were utilized in the formation of the theme
– collective responsibility for learning.

The strengths and weaknesses of the professional learning community were
identified by participants in the study. The three major categories that emerged were
constant communication, collective work on curriculum, instruction, and assessment,
time, and reflective conversations. The resulting theme was strengths and weaknesses of
the professional learning community.

The findings related to research question 4 were related to learning community
practices that enable change in the culture of Collaborative Middle School. Within the
theme of mindset of continuous improvement, the following categories emerged:
collective problem-solving, high expectations for all learners, and shared
workload/accountability.

These findings underscore the importance of teachers receiving adequate support
from the administrative leaders in their school buildings. Additionally, the importance of
working collectively to carry out the tasks and responsibilities of the PLC allows an
exchange of ideas and a pooling of resources. Furthermore, the findings indicate that
adequate time for PLC tasks is an essential component of an effective learning
community.
**PLC Middle School.** The findings at PLC Middle School revealed that the learning community model assuredly impacted the learning and instructional capability of the staff. The resulting categories were teacher collaboration, culture, communication, and teacher empowerment. The theme that emerged was collaborative culture.

The findings indicated that instruction and the academic environment were impacted by involvement in the professional learning community. The categories that emerged were continuous improvement, focus on student learning, and shared vision and goals. These categories contributed to the formation of the theme of results orientation.

Research question 3 allowed participants to identify the strengths and weaknesses of the professional learning community. The three major categories that emerged were teacher support, use of data, and time/scheduling. The resulting theme was barriers and facilitators for PLC implementation.

The findings for research question 4 revealed that participants believed that there was a strong culture of collaboration; the staff collaborates to carry out the responsibilities of the PLC. The categories that emerged were shared resources, willingness to try new ideas, and shared workload/accountability. The resulting theme was culture of collective responsibility.

These findings emphasize the importance of collaboration to a professional learning community’s success. Continuous improvement can only be accomplished by constant communication, a clear and direct focus on student achievement, the creation of a strong vision and the implementation of solid systems of accountability.
Chapter 5: Discussion

This study examined the perceptions of school staff at three study sites in relation to the professional learning community framework and its impact on teacher pedagogical practice, student achievement, and school culture. The Professional Learning Community Assessment questionnaire and interviews were used to investigate the selected research questions. This study sought to identify school staff’s perceptions of the impact that the professional learning community framework has on teacher pedagogy, school culture, and the academic climate. The findings allowed the researcher to provide insight into the PLC practices that aid and hinder implementation and sustainability. The following four research questions were used to guide this inquiry:

1. What are the perceptions of school staff regarding the impact of PLCs on their learning and effective teaching practices?
2. How do PLCs affect classroom pedagogy and the academic environment?
3. What are the strengths and weaknesses of the implementation of a PLC as perceived by the instructional staff?
4. What PLC practices facilitate a change in the culture of the school?

Chapter 5 begins with an overview of the findings from the study as it relates to each of the study locations. A cross analysis that highlights the similarities and differences in the professional learning communities at Mapleville Middle School, Collaborative Middle School, and PLC Middle School is also provided. The overarching implications for practice are discussed, and a review of the limitations of the study
follows. Final recommendations for future research are given, followed by a summary that concludes the overall dissertation.

Summary of the Findings

Mapleville Middle School. Mapleville Middle School (MMS) is a 6-8 school that is part of the New York City Department of Education. The participants provided significant data that allowed the research questions to be answered. The findings from this location are presented in the section that follows.

Research question 1. Research question 1 focused on school staff’s perceptions of the impact the professional learning communities have on their learning and their ability to utilize effective teaching practices. The insights into this research question can promote greater learning for both educators and students. The first finding indicates that collegial relationships are an integral component of the PLC at Mapleville Middle School. The categories that emerged were: teacher support, teacher collaboration, culture, and administrator support. These were factors that allowed the pedagogical staff at MMS to feel a great sense of support from their colleagues as well as from the administration. At Mapleville Middle School, school staff believes that the professional learning community (PLC) model has positively impacted the manner in which staff members interact with one another. The teachers work collegially to strengthen practice.

The second finding suggests that teachers feel supported by their colleagues, and they meet regularly to improve the structures that are in place to ensure that they become more effective in their instructional practice. Some pedagogues report that they feel supported by the administration in a number of ways including the following behaviors by the leadership team: encouraging experimentation and risk-taking, allowing staff
members to attend outside professional development sessions, and bringing in brand new resources and strategies. When teachers meet, they are able to discuss practices that work and those that are archaic. They are then able to utilize the best practices that are identified within their own classrooms. The advantages of the PLC are also noted in the research.

The third finding that relates to research question 1 is the category of culture. One participant discussed the culture of the school prior to the implementation of the professional learning community. This environment was defined by the lack of cohesion, nonexistence of high student expectations, and the absence of shared ideas. Once the learning community was implemented at Mapleville Middle School, participants noted the transformation to a culture of solid relationships, trust, and mutual respect. As a result of the increase in collaboration and shared ideas, toxicity has been lessened, and staff members are much more willing to take risks. It is evident that there is a shared culture of respect. Participants discussed the value that each member brings to the PLC in terms of his or her skills and talents. These personal attributes, the participants believe, assist the team in being more productive and impactful. This finding is consistent with the research of Jessie (2007), which hypothesized that one of the main objectives of the learning community is to uncover the talents, aspirations, and skills of participants, and to highlight them for the good of all stakeholders. Harris and Jones (2010) posit that teachers utilize their knowledge and talents to make decisions, while accepting joint responsibility for the result of their partnership.

The fourth finding aligned to research question 1 reveals that participants indicated that when new concepts or ideas are introduced by staff members, there is little
support from the administrative staff. Additionally, according to participants, staff suggestions are not always welcomed by the leadership. The result is that some members of the teaching staff feel unsupported and less effective in their ability to meet the needs of their students. Despite the seeming lack of interest in the staff’s ideas, when novel ideas that work are introduced, they often become school-wide practice. Moreover, practices that are proven to be disadvantageous are eliminated, based on teacher input.

Buttram and Farley – Ripple (2016) interviewed 10 school administrators in a mixed methods study. The findings of this research reveal that school administrators have a direct impact on the extent to which staff members are involved in the professional learning community, how often they participate, and the type of data analysis that is conducted. When PLC participants are unable either to adequately immerse themselves in the work associated with the framework, or have input into the structures that are established, their professional learning is impacted.

**Research question 2.** This research question focused on the impact of the professional learning community on pedagogy and the academic environment. There were three major findings that emerged from the research. The first major finding suggests that the PLC framework at Mapleville results in a strong focus on learning and student growth. The categories that emerged were focus on student learning, data driven decision-making, and intervisitations. These components are essential not only for improving student achievement but are also necessary for an effective learning community. This finding reveals that PLCs are impactful when pedagogues spend a substantial amount of time analyzing data from student assessments and classroom assignments. The data is then utilized to revamp the curriculum and modify instruction.
Teachers analyze students’ test scores and identify those students who have grasped the key concepts and those who are struggling.

Finding 2 indicates that data analysis plays a significant role in the success of the professional learning community. Darling-Hammond et al. (2009) examined a previous study on the impact of data-driven instruction and found that this undertaking leads to change in practice and increased student achievement. The participants in this study feel that data analysis leads to more impactful learning, greater student engagement, and improved student performance. Additionally, intervisitations in which teachers visit one another’s classrooms and supply feedback are regularly employed to foster growth in school-wide student and teacher learning. It is evident that when school staff works collaboratively to improve learning, thereby holding themselves accountable, continual improvement is fueled (Dufour et al., 2008). Teacher teams that are most successful are focused on learner-centered outcomes; this mindset results in shared responsibility and fosters a culture of learning for all.

**Research question 3.** The purpose of research question 3 was to assess participants’ perceptions of the strengths and weaknesses of the learning community that is present at Mapleville Middle School. Participants’ responses provided a detailed overview of their perceptions on the PLC that currently operates at Mapleville Middle School. Results from the data indicated that there are both beneficial and detrimental aspects of PLCs. The categories that emerged were time and structure, type of meeting/group, and shared and supportive leadership. Mapleville’s participants identified several barriers and benefits that both aid and hinder the sustainability and effectiveness of the professional learning community. The initial barrier that was discussed was the
lack of sufficient time to carry out the responsibilities of the PLC. Respondents cited competing activities as one of the chief reasons that adequate time is unavailable. There are times, for instance, when meetings are scheduled, but the school leader designates an alternative event during this period. Additionally, given the commitment necessary for completing assessments, lesson plans, and intervisitations, there is often not enough time for school staff to complete tasks that are essential to the PLC’s effectual operation.

The findings suggest that time is an integral element in high-performing learning communities. Research shows that when teachers are given adequate time to collaborate and exchange ideas, student performance is positively impacted. Lujan and Day (2010) posit that successful PLCs are ones in which time is dedicated solely for teachers to meet, plan together, analyze data, and modify the curriculum as necessary. In their study of 37 certified employees who were members of learning communities, these researchers found that participants who met regularly in structured and focused settings had great success. Teachers were also more committed, and participants noted that even during periods when meetings were not required, the meetings continued. Furthermore, Hughes-Hassell al. (2012) asserted that the exorbitant number of tasks that teachers must complete adversely impacts their ability to contribute sufficiently to the learning community. Hargreaves (2010) also found in a review of research that lack of time significantly impacts pedagogues and ultimately the academic environment.

**Research question 4.** Research question 4 focused on PLC practices that facilitated a change in the culture of the school. The findings that emerged related to the manner in which teachers and other staff members work together. This research question also encompasses the beliefs, values, perceptions, and norms that comprise the persona of
the school. The findings suggest that the school culture is one of collaboration and
collegiality. The categories that emerged were structures, common assessments, and
continuous revision of units and lessons. The emerging themes are aligned to the research
of McLaughlin and Talbert (2006), that identified the overarching responsibilities of PLC
participants. These researchers affirmed that teachers collaborate to reflect on practice,
make changes to impact the learning of students, examine student work products, and
modify lessons and curriculum. Staff members regularly partner with one another to
effect schoolwide change. The findings clearly denote commonality of purpose and
practice leads to shared values and vision. This results in a school culture of trust, mutual
responsibility and accountability, and a willingness to share ideas and resources. As it
relates to finding 1, participants noted that specific structures that are in place at
Mapleville lead to a culture of positivity. It is important to note that participants indicated
that the positive culture permeates the entire organization and has led to an effective
learning community. The principal also analyzes data to ascertain the level of student
growth. Dufour et al. (2008) identified a series of cultural shifts that must be made for
PLC sustainability and success. The third shift necessitates that educators engage in
ongoing collective inquiry and action research. Participants indicated that this shift is
present at MMS.

The second finding related to common assessments. There is a deliberate focus
on designing common assessments. These assessments provide a similar starting point
for all students at Mapleville. Participants indicated that these assessments provide
valuable information about students’ current level of functioning. Each time that the
assessment is administered, the educator receives data about the child’s level of
performance and whether there are gains or losses based on the overall score. The data, including the results of common assessments, are an example of the category of continuous revision of units and lessons. Diagnostic tools such as common assessments, allow pedagogues to better understand the types of modifications and adjustments that are necessary. Lessons are altered regularly to avoid the one size fits all mentality. Differentiated lessons, materials, and activities allow students to receive individualized instruction.

**Collaborative Middle School.** Collaborative Middle School (CMS) is a school that serves students in grades 6-8. The study participants provided valuable data that answered each of the research questions that anchored this study.

**Research question 1.** Research question 1 focused on school staff’s perceptions of the PLC model and its impact on their knowledge base and their ability to utilize effectual teaching practices. The major findings that emerged from the data provided valuable insight into answering the above research question. The findings for research question 1 suggest that teacher support is instrumental for the success of both the educator and the professional learning community. The categories that emerged were teacher collaboration, professional development, and teacher empowerment. These areas allowed teachers at Collaborative Middle School to strengthen their knowledge base and increase their own learning. The first finding indicated that teachers work closely together to plan lessons and to exchange ideas. Teachers also meet regularly and are able to unite their expertise, skills, ideas, and enthusiasm to support their vision of improving student achievement. The participants spoke of being able to work closely with their colleagues to share their ideas on what works and what does not work. The positive
impact on teachers’ learning and instructional decisions is supported by the literature. Rentfro (2007) conducted a study and found that student achievement increased when educators met as little as two times per week in the learning community. Reichstetter and Baenan (2007) conducted a two-part study that analyzed a school in the beginning stages and then during the second year of PLC implementation. They found that when teachers met more frequently, teacher satisfaction with the skills that they developed improved from 71% to 89%.

The second category, professional development, also revealed that participants felt that their knowledge and instructional capability was augmented when they were actively engaged in learning community activities. The participants contended that the professional development offered at CMS had a positive effect on their ability to deliver quality instruction. Participants commented on the value of departmental and cross-departmental training. This, they believed, allowed them to ensure that there were similarities in schoolwide practices to improve academic success. One participant noted that while there are professional development trainings offered, more trainings need to be instituted at CMS for progress to continue. School staff also touted the benefits of job-embedded professional development but indicated that the practice needs to be strengthened at Collaborative Middle School. This refers to teacher learning that is enmeshed in day-to-day teaching. Darling-Hammond et al. (2009) expressed the importance of job-embedded professional development. Participants noted that when the training is job-embedded, teachers are more invested in these exercises because it relates directly to their roles and responsibilities. These researchers propounded that this practice has the potential to strengthen individual or team-centered teacher learning. Job-
embedded training, they contend, promotes dialogue amongst the teaching staff related to specific and concrete steps that can be taken to boost student achievement. King (2014), on the other hand, asserts that there are a number of factors that must be considered prior to selecting professional development activities for school staff. These include their professional roles, their attitudes and disposition, and staff members’ views of their own professional identity. These findings suggest that school administrators will need to identify creative ways to support job-embedded training that will have a favorable effect on school staff.

The third finding addressed the category of teacher empowerment. The participants shared that when school staff is given the ability to participate in decision-making, teachers feel valued, and there is an increased sense of commitment. The staff members cited the ability to personalize assessments and lesson plans adds to the feeling of empowerment. The administration also encourages employees to attend outside trainings; this allows staff to present the information that they have received to their colleagues, thus promoting trust and mutual respect. The idea of empowering teachers is supported by Roberts and Pruitt (2009). These researchers maintain that teacher leadership opportunities, including participation in major decision-making, helps to foster increased commitment and produces a more favorable school culture. Additionally, the leadership of the school principal is vital for inspiring positive organizational change. Dufour et al. (2010) noted that effective principal leaders are able to relinquish control, thereby showing that there is a strong level of trust in one’s staff. As a result, these researchers explained, teachers become more inventive and less afraid to take risks.
The fourth finding focused on intervisitations. The participants discussed the beneficial aspects of this practice. Participants explained that teachers take turns visiting one another’s classrooms to view lessons. Feedback and suggestions are then offered. These recommendations are then utilized as a means for improving teacher delivery and student learning. During intervisitations, teachers are also able to take notes, ask questions, and seek clarification from the host teacher. A period of reflection follows and best practices, as well as areas in need of improvement, are discussed. Killion and Roy (2009) identified several methods that staff members can use to share their ideas as part of the PLC process. These included team walkthroughs, fishbowls, facilitator meetings, and intervisitations. Wepner, Gomez, Cunningham, Rainville and Kelly (2015) support the idea that intervisitations benefit school practice and success. These researchers go a step further by recommending that schools create lab classrooms that incorporate the feedback from the intervisitations. These classrooms would feature model teachers who would be responsible for showcasing quality instruction. These findings suggest that peer-to-peer feedback is an essential component of a high-performing learning community and must be implemented frequently for this practice to be effective.

**Research question 2.** Research question 2 focused on classroom pedagogy and the academic environment. There were three major findings that emerged from the data. **Major findings for research question 2.** The initial category of student growth suggests that the staff members at Collaborative Middle School are dedicated to ensuring that students consistently demonstrate improvement in the academic realm. Despite this reality, several participants mentioned the lack of continuity within grade levels and across subject areas. The systems that are in place are not consistent throughout the
school community. Participants indicated that the learning community has a definite impact on practice that is evident in tangible forms such as student portfolios. These items allow an individual not familiar with the learning community practices at CMS to view student portfolios for evidence of student improvement and growth. The staff at Collaborative Middle School also involves parents in the process to further bolster student achievement. This is done through an online gradebook. This forum provides parents with data related to their child’s performance. It allows parents to be aware of areas in which their children may be experiencing difficulty. The findings show that increased efforts should be made in the future to create a streamlined process across all grades and subjects to ensure that every student is receiving quality instruction using similar materials and methods to promote growth. Research shows that effective learning community participants have shared vision, values, and mission (Dufour & Eaker, 1998). The findings reveal the need for a clear vision throughout the CMS community.

The second finding pertains to the category of mindset of continuous improvement. The staff at Collaborative Middle School is constantly searching for ways to better achieve major goals and objectives of the organization. This is facilitated when staff members revamp lesson plans, examine student data, and develop strategies to address the weaknesses that exist within the PLC. The participants indicated that the work of continuous improvement is a part of the everyday culture at CMS. The staff members work to improve all aspects of the learning community. The findings clearly outline that efforts to modify practice and impart necessary change is vital to deepening teacher understanding of the content and improving the experience of all students. Dufour et al. (2008) conducted a study that revealed that school leaders are instrumental
in maintaining a consistent effort to enhance the learning community and its impact. This research also discusses three shifts that must take place for members of the PLC to be successful. Shift 3 requires that an ongoing process of recurring cycles be undertaken by school staff to constantly assess the needs of the PLC. The participants of this study noted that the absence of continuous improvement would create a stagnant atmosphere that is devoid of significant progress.

Finding 3 is related to the category of shared vision and goals. All of the participants in this study mentioned that there is a shared vision and the existence of clear goals for success at CMS. One participant noted that decisions that are made at CMS are based on the main goal, which is to ensure that students learn, and teachers improve their instructional capability. Some participants expressed that there is a need for varied goals in the various classrooms. Schoolwide goals, which are much broader are necessary, however classroom goals, participants maintained, should be established as a means for meeting the needs of diverse student learners. The findings also show that the CMS participants believe that student learning is the responsibility of all staff members, not simply the teachers. The participants stressed the need for a collectivist mindset rather than an individual one. Barton and Stepanek (2012) postulated that when all staff members work collaboratively, the entire school community benefits. One participant noted that when everyone works together ideas are generated that improve the culture and the classroom.

**Research question 3.** This research question focused on the strengths and weaknesses of the professional learning community as perceived by Collaborative Middle
School staff. The categories that emerged were constant communication, collective work on curriculum, instruction, and assessment, time, and reflective conversations.

**Major findings for research question 3.** The first research finding suggests that PLCs that are successful and sustainable have at their core the tenet of constant communication. Staff members at Collaborative indicated that learning community meetings are held every Tuesday after school. Despite this, participants indicated that informal conversations occur throughout the week. The participants discussed the benefits of open communication, which include receiving assistance when challenges arise, sharing new ideas and information, and brainstorming to make quality decisions. Other participants described the culture of trust and respect that is fostered as a result of regular dialogue amongst colleagues. Kohm and Nance (2009) contend that the behavior of teachers, especially when they are mutually supportive of one another, will dictate how successful the learning community is. As such, the findings reveal that there are certain personal characteristics that must be developed for learning community members to contribute positively to the team. The findings also suggest that the more staff members communicate, the more able they are to participate in effective decision-making. Constant communication results in reflective practice and promotes collective responsibility.

The second finding relates to the category of collective work on curriculum, instruction, and assessment. The findings reveal that Collaborative Middle School participants regularly modify curriculum, instruction, and assessments. Overall, the participants spoke highly of the collaborative culture that is present at CMS. The staff members regularly engage in collective inquiry. As part of this process, the curriculum is
assessed to ascertain how well it aligns with what is actually being taught. The staff members reported that student work products are assessed, and misconceptions are identified. Strategies for reteaching the material are then suggested. If necessary, the participants alter the lessons that are included in the unit, and at times new lessons may need to be added if the current ones do not address all aspects of the curriculum. This collaborative work is appreciated by the CMS staff members, and it is also supported by the research. Reeves (2010), found that effective professional learning experiences are most valuable when they are intensive, sustained, and provide opportunities for application, practice, and reflection.

Rosenholtz (1989), conducted a study of 78 schools to gain greater insight into teachers’ work environment. Over the course of this research, Rosenholtz found that there were two types of schools – learning enriched and learning impoverished schools. In learning enriched schools, Rosenholtz found that the collaborative groups that were formed focused on student achievement and teacher improvement. These schools regularly made changes as necessary. Based on Rosenholtz’s study and participant responses, CMS falls into the learning enriched category, and participants feel that the practice of collective work is advantageous.

The third finding relates to time. Participants identify lack of time as one of the weaknesses of Collaborative Middle School’s professional learning community. One participant described the competing tasks that make it difficult to formulate a high-quality learning community. Participants discussed the desire to teach the necessary material, without simply covering material that is essential for the state test. This takes away from
the ability of the teachers to deliver quality lessons that cover all aspects of what students must be taught.

Staff members at CMS report that one of the major goals for the year is to improve student achievement. One of the ways that staff members ensure that this goal is reached is to engage in a cycle of inquiry. In this process, an issue in student performance is identified, and an action plan is designed. Participants, however, explained that the inquiry process is lengthy, and often times, it is a challenge to complete the inquiry cycles. The participants reported that occurrences such as serving as a substitute for an absent colleague will sometimes impact their ability to complete the tasks that are necessary for the next learning community meeting. The findings also reveal that the subject-specific learning communities are often facilitated by one of Collaborative Middle School’s assistant principals. Participants reported that the facilitator must be aware of the importance of relinquishing control of the meeting to the participants at a reasonable time to provide the team with ample time to complete PLC related tasks. Hord (2009) suggests that to promote greater success in the learning community, school leaders must provide supportive structural conditions such as sufficient time, place, and resources. Wahlstrom and Louis (2008) support this idea with the study on how principal relationships impact the professional practices associated with the learning community. The study concluded that principal behavior and decision-making have a definitive impact on instructional behaviors, self-efficacy, and practice of staff with regard to the effectiveness within the learning community. Participants reported that when the administrative staff spent a short period of time facilitating
meetings, and then surrendered control to the staff, it sent the message that the staff was trusted and respected in their ability to make quality decisions.

**Research question 4.** The focus of this research question was to assess staff perceptions of the extent to which school culture was impacted by specific professional learning community practices. The categories that emerged were collective problem solving, high expectations for all learners, and shared workload/accountability.

**Major findings for research question 4.** The first finding suggests that staff members at Collaborative Middle School partner to identify solutions to challenges that arise. To facilitate this process, staff meet regularly to discuss issues pertaining to student achievement and teacher instructional practice. All members of the team are seen as beneficial and thus input is welcomed. Ideas are exchanged and then subsequently utilized to assess their value in solving the problems that may occur. The problems that arise are usually identified from various types of data that the staff members examine and disaggregate to identify the trends that exist. This results in a culture of collaboration, builds trust, establishes strong relationships, and fosters communication. This idea of forming relationships supports the research of Tan and Caleon (2016) on the impact of collaborative problem solving on pedagogues and student learning. These researchers posited that when teachers participate collaboratively to find solutions to challenges, their understanding of individual students is heightened and there is increased clarity about what students should learn.

The second finding indicates that high expectations for all learners plays a significant role in the success of the learning community as well as in student outcomes. The analysis and findings suggest that when staff members have lofty expectations for
students, there is a deep commitment and dedication that is fostered, and teachers are much more invested in ensuring that students are successful. Staff members feel that in order for the learning community to be effective, there must be an exchange of ideas, but also a willingness to share materials and resources that can benefit this diverse community of student learners.

It is evident that participation in the learning community necessitates that the needs of the community are assessed regularly so that participants are aware of the strengths as well as the weaknesses that exist (Linder et al., 2012). The effectiveness of the learning community is reliant upon participants’ ability to set high expectations and to subsequently select and implement strategies to meet student and educator learning targets (Hord, 2004). The participants noted that one of the chief goals of the PLC is for students to continue to show growth each time that the data is analyzed. The need to constantly alter the curriculum and modify lesson plans is an important step in the process of not only setting high expectations but ensuring that students are progressing steadily throughout the school year.

The third finding suggests that teacher shared workload/accountability is an essential component an effective learning community. The teams regularly partner to assess data and to analyze student work products. Teachers hold one another accountable by setting deadlines by which specific items are due. According to some of the participants, team members are also able to provide actionable feedback after participating in an inter visitation cycle. This allows staff members to ensure that stagnancy is eliminated, and that the team’s major focus revolves around continuous growth. One participant also discussed the idea that isolation is eliminated, and thus
teachers no longer feel overwhelmed when there is a culture of shared practice amongst members of the staff. This idea is contrary to the one that Hadar and Brody (2010) present in their research. These researchers posit that most of the dialogue between members of the school community is casual rather than in-depth and insightful as it pertains to quality teaching and student achievement. On the other hand, the research of Darling-Hammond and Richardson (2009) supported that participants’ idea that when properly implemented, the sharing of PLC tasks results is an increase in teacher instructional ability.

**PLC Middle School (PLCMS).** PLC Middle School serves students in grades 6-8. The study participants’ responses yielded a significant amount of data that answered each of the research questions.

**Research question 1.** This research question focused on the perceptions of school staff as it relates to the impact of the professional learning community and its impact on their learning and teaching practice. There were four categories that emerged from the data.

**Major findings of research question 1.** The first finding suggests that teacher collaboration is a significant aspect of the learning community at PLC Middle School. The categories that emerged were teacher collaboration, culture, communication, and teacher empowerment. Participants stated that collaboration is beneficial to their learning as well as their teaching ability. Staff members noted that they are grateful for the opportunity to hear the ideas of others because this can often provide them with valuable ideas and suggestions. Participants espoused the idea of working together because it strengthens the practices that are used in the school community. Additionally, the
opportunity to work with other departments was seen as advantageous. This allows for the development of strategies that can be used across subject areas as well as provides an opportunity for pedagogues to create strategies to be applied to individual students. The staff collaborates to identify effective practices and strategies that can be incorporated into the learning community that will transform the teaching and learning that occurs.

One staff member contended that the learning community meetings are effective because students often show growth throughout the inquiry cycle. These findings are in harmony with the research of Newmann and Wehlage (1993) who conducted research in several schools to identify the common factors that existed in sites where students performed well in math, science, and social studies. The main commonality is that these schools had staff members who were participating in professional learning communities. The teachers, much like those at PLC Middle School, met regularly, thereby enhancing their skills and knowledge.

The second finding relates to the category of culture and suggests that it plays a major role in the success of the learning community model. One important aspect of the participants’ response highlighted the fact that staff members often assess the strengths and weaknesses of themselves and their colleagues. This practice is undertaken so that there is an awareness of the areas of need that exist in terms of staff expertise at PLC Middle School.

As a means for exploring these strengths and weaknesses, intervisitations are utilized. When visiting one another’s classrooms, a single teacher presents a lesson and the staff visitors take notes. At the conclusion of the visit, the group meets, and feedback is offered. A brainstorming session is then employed to create
strategies to address the challenges that occurred during the lesson. A series of lessons are then written that are used across various classrooms. This culture of sharing allows for the development of new skills, increased teacher confidence, and an undeviating focus on student learning. Little (1982) conducted research on teacher and principal perceptions on the impact that collaborative practices have on school culture. The findings were similar to the responses of the participants. Little found that when teachers work together, there are significant gains in student achievement, improvement in lesson planning and delivery, and an enhanced focus on student learning.

The third finding suggests that continuous reciprocal communication amongst learning community participants is essential for increased staff motivation and willingness to work together. Participants indicated that discussions center on instruction, curriculum, and student achievement. One participant indicated that the PLC will not improve overnight, but that regular communication amongst staff members allows all members to gain full understanding of what is occurring so that systems can be put into place over the course of time to begin effecting change. Moreover, the communication is not simply amongst staff, but also occurs within the student body. Staff members report that students often discuss the similarities in strategies and practices that are present across subject areas. Furthermore, participants asserted that communication allows for the discussion and exchange of ideas that can be used to improve instruction and teachers’ own learning. These findings are consistent with that of Kruse et al. (1994) who indicate that communication within the professional learning community allows for a heightened focus on student learning, supports leadership and decision-making, and serves as a catalyst for the exchange of ideas.
The fourth finding suggests that teacher empowerment is embedded in the culture of PLC Middle School. Participants feel that leadership is shared, and that the administration values staff members’ input. The principal gives staff members the opportunity to decide when they will hold meetings, the length of time that the meeting will last, as well as the topics and agenda items that will be the focus of each learning community meeting. The findings indicate that the more empowered staff members feel, the greater the likelihood that effective decisions will be made and that the PLC will be successful. These findings are similar to research conducted by Mangin and Stoelinga (2010) who note that members of PLC staff who are regularly involved in making decisions for the school community, become more adept at this practice. Roby (2011) indicated that empowered staff members experience greater success in the classroom environment because they are able to create an atmosphere that is welcoming and where students want to be. Additionally, Nolan and Palazzolo (2011) suggest that the impact is not solely felt by students but is experienced by teachers as well. These researchers contend that teachers who are leaders, experience an increase in job satisfaction, a greater commitment to student achievement, and an increase in self-efficacy.

**Research question 2.** This research question focused on the perceived impact of the professional learning community on classroom pedagogy and the academic environment. There were three major findings that emerged. These were continuous improvement, focus on student learning, and shared vision and goals.

**Major findings of research question 2.** The first finding suggests that the staff members at PLC Middle School are invested in continuously improving the academic and pedagogical environment. The members of the learning community report that there is
sustained commitment to maintaining an effective learning community. Staff members report that the dedication to continuous improvement is a mindset that is present not only with the staff, but amongst the leadership as well. The school leaders encourage regular meetings to improve the outcomes for both staff and the students who attend PLC meetings. Practices including common planning time for educators provides time for teachers to exchange ideas, hold discourse around instructional performance, and discuss ways in which to strengthen existing lesson plans.

Westheimer (2008) postulated that teachers are unable to learn if they communicate infrequently. These conversations are a catalyst for constant improvement. One participant identified experimentation as a method that allowed for the staff members to take risks when trying new methods to extend educators’ knowledge and improve the way that students learn. In the math department, for example, teachers show students novel ways for solving problems. Varied graphic organizers, manipulatives, and differentiated activities are also utilized to boost student engagement and performance. Participants also identified goal setting as a means for the school to continuously demonstrate growth. Furthermore, veteran teachers often serve as mentors to their colleagues to provide valuable professional development. Finally, data is analyzed and interpreted, and adjustments are made as necessary. Participants tout this practice as essential to strengthening the learning of the educators.

According to Morrissey (2000), schools cannot be transformed into productive institutions for students until teacher learning is addressed. This assertion supports the ideas put forth by staff members. Participants also reported that their teaching ability often improved as a result of the mindset of continuous improvement that drives
decisions at PLC Middle School. Dufour (2014) conceded that when there is a focus on adult learning, student learning is positively impacted as well.

The second finding suggests that student learning is the driving force behind the professional learning community. Participants described methods and strategies that are employed to meet the needs of students. These include Socratic circles, Socratic seminars, and the making thinking visible strategy, which allows students to thoroughly explain their responses to specific questions. Students are also encouraged to reflect on specific concepts either in a written journal entry or via technology as a blog or through other online options.

Furthermore, student work products are assessed as a means for identifying areas of student difficulty. These challenges are then addressed through solutions and strategies that are decided upon by the members of the learning community. The participants believed that in order for the PLC members to meet with success, student learning has to be at the forefront of any initiatives and strategies that are utilized. This assertion by participants is in direct contrast to Bayar’s (2014) research in which the findings posited that there is little consensus related to the types of activities that should be included in teacher training activities and programs. It is evident from participant responses that activities should center on teaching teachers how to analyze and interpret data and how to employ lessons that will increase student engagement, efficacy, and achievement. Mizell (2010) believes that the most effective professional development will deepen pedagogues’ knowledge, equip teachers with the expertise necessary to differentiate instruction and produce a change in student performance.
The third finding reveals that there is a shared vision and goals that permeate the culture at PLC Middle School. The vision includes a focus on teacher collaboration, attention to student outcomes, and commitment to staff professional development. Participants tout collaboration as an essential practice for effecting change across the various classrooms at PLC Middle School. One participant indicated that collaboration produces tangible results that working in isolation could not. According to Rosenholtz (1989) working in isolation leads to a lack of support from colleagues and the absence of staff members sharing ideas with one another. Working collaboratively, according to participants, is an important aspect of the PLC dimension of shared values and vision. Kouzes and Posner (2003) express that cohesion in stakeholder goals is important to student academic success and is vital for the creation and maintenance of a collective vision.

**Research question 3.** This research question focused on the strengths and weaknesses of the professional learning community. The categories that emerged were teacher support, use of data, and time/scheduling.

**Major findings of research question 3.** The findings clearly reveal that participants value a supportive environment and believe that it contributes positively to improving teacher pedagogy, strengthening teacher learning, and creating an environment in which collective inquiry is appreciated and utilized. Participants report that the support that is received comes from other staff members as well as from the school leaders. This behavior by the school leader is applauded by Hord (2009) who states that the principal’s role is to ensure that the PLC meetings are occurring on a regular basis. Hord also indicates that the principal’s purpose is to support and foster collaborative
conversations about the needs of students and the ways in which staff learning directly impacts student success. One participant noted that the principal encourages staff members to try new things and new approaches. Participants discussed the systems that exist to introduce new staff to PLC Middle School’s practices. The participants noted that new staff members are provided with a number of resources, including curriculum maps and units that dictate the concepts and ideas that must be taught over the course of the school year. There is an open-door policy for veteran and new teachers. New teachers can visit their colleagues to ask questions or to seek clarification about topics or ideas. Ongoing supportive professional learning has positive effects on PLC participants. These include reinvigoration and reduced instances of staff burnout (Hakanen, Bakker, & Schaufeli, 2006).

The third finding suggests that data analysis and interpretation are integral to the success of the learning community. Staff members report using multiple forms of data to determine the current levels of the students. Participants report that there is a requirement that student work that is being analyzed be brought to the learning community meetings by an established deadline. This practice is instrumental in ensuring that staff members are held accountable and that the inquiry cycle is uninterrupted. During the meetings, the data might also consist of student exams or assessments. The questions are examined to gain a better understanding of what students were asked to do. Also, the questions are assessed to determine which skills are needed to respond to this specific set of questions. Finally, the scope and sequence document is examined to ascertain whether or not the concepts that are necessary to perform well on this exam have been taught in prior years.
Wayman, Midgley, and Stringfield (2007) discovered that using data was most effectual when staff had access to a variety of data types and worked collaboratively to ensure that their expectations were aligned with one another and that they could actually use the data to participate in instructional decision-making. While the teachers at PLC Middle School work diligently to ensure that students are successful, students themselves are taught to take ownership for their learning as well. Once the school staff has identified students’ strengths and weaknesses, the students themselves set goals that can remedy the challenges that have been noted. Sparks (2003) supports this PLC-related action and propounds that high-quality professional learning communities have a positive outcome for all stakeholders, including students.

**Research question 4.** This research required participants to identify learning community practices that impact the culture of PLC Middle School. Three major findings emerged. These were shared resources, willingness to try new ideas, and shared workload/accountability.

**Major findings of research question 4.** The first major finding suggests that the culture of sharing resources and ideas is a motivational factor for participants to continuously strive for the success of the professional learning community at PLC Middle School. Staff members report that the sharing of resources is a regular occurrence at this site. This practice promotes a culture of inclusivity, support, and collective learning. Participants indicated that resources including lesson plans, graphic organizers, worksheets, and other similar materials are exchanged often. This results in a consistent set of resources across classrooms. This is beneficial as it pertains to data analysis. When the resources and practices are similar, the ability to identify the similarities and
differences between students and classrooms becomes clearer. Therefore, it is simpler to identify challenges that consistently arise. Participants indicated that the use of common assessments provides an evaluation method that simplifies the process for ascertaining the common trends across classrooms and grade levels.

This level of commonality promotes schoolwide improvement because the results can easily be assessed to identify common student misconceptions for the purpose of improvement. Participants noted that once these similarities are identified, targeted interventions are created to improve the educational attainment and achievement of the student body. Heritage, Kim, Vendlinski, and Herman (2009) explained that common assessments are a means by which to continuously compile evidence related to student achievement. These researchers assert that these assessments provide valuable feedback to the school community on student progress and allows teachers to determine if progress is being made towards their overall goals. This finding mirrors the experiences of participants in this study in that several mentioned that data from common assessments drives the decisions that are made with regard to the changes that are implemented to bring about change in instructional practice.

The study conducted by Fisher and Kopenski (2007) at an urban high school, also mirrors the findings of this study. The findings in the study revealed that common assessments allowed staff members to make decisions based on verifiable and concrete evidence. The researchers stated that, “teaching moved from well-intentioned guesswork to a finely tuned dance increasing the precision of teaching” (Fisher & Kopenski, 2007. p. 64-65). Similarly, participants at PLCMS reported being able to examine the data set and
then making informed decisions about the ways to best alter factors such as content and rigor to aid students in reaching success.

The second finding relates to the willingness of participants at PLC Middle School to try new ideas. Participants indicated that experimentation has a major influence on the manner in which the professional learning community and classroom decisions are made. The participants reported that there is a readiness amongst school staff to incorporate new ideas and to try brand new strategies. Action and experimentation play a crucial role in maintaining a firm focus on student learning (Hannaford, 2010). This assertion is in line with the culture at PLC Middle School, where staff members do not shy away from taking risks that they believe will serve as a catalyst for change. One participant explained that the administration strongly supports the staff’s desire to depart from traditional methods. This participant noted that the school leader has never denied the staff’s requests when it comes bringing novel concepts and fresh ideas into the classroom. Participants likened the culture of experimentation to using trial and error to figure out the most appropriate tools to create long lasting change. Participants reported feeling as though their ideas are valued and that the school leaders truly have prioritized student achievement as its central goal. Staff members reported not being required to use specific materials or resources, but rather being given the autonomy to utilize strategies and methods that work best. The research of Lezotte (2005) found that professional learning communities provide effective and enduring change when teachers demonstrate a willingness to embrace school reform through experimentation and collaboration. The principal mentioned that experimentation is used by the administration to select staff members to lead professional development trainings. This,
the leader mentioned, develops a willingness in the staff to participate because their colleagues are discussing practices and strategies that can be implemented in their respective classrooms.

The third finding suggests that there is a culture of sharing the workload as well as a deliberate focus on accountability. Participants report that every member is valued and seen as a vital component of the learning community. Staff members believe that the learning that occurs is not an individualistic effort, but one of collectivism. Norms have been established as a guiding force for the expectations of the staff. These principles have added a level of peer accountability that has ignited commitment to the PLC. One participant explained that the tasks that must be completed are divided amongst the members. This decreases the likelihood that staff members will feel burdened and inundated with various responsibilities. Moreover, the teaching staff creates lesson plans and gathers material collectively. Staff members believe that the lessons should be created collaboratively because they will be utilized by the team. Participants indicated that a collective process is also used to select the standards and strategies that each lesson will address. This is based on assessment results and student work samples. Stigler and Hiebert (2009) conducted an analysis of the data that was presented in the Trends in International Mathematics and Science Studies (TIMSS). The findings do not fully align with the findings within this study. Based on the results of the data analysis, Stigler and Hiebert maintain that while there should be a system of accountability, it should extend beyond the learning community. These researchers recommend incorporating professional development as a career-long endeavor. The trainings would take place in laboratory classrooms on a continuous basis. Teacher practice would then be observed to
evaluate the instructional capability of the educator. Stigler and Hiebert believe that this system would bring about greater accountability.

**Cross Analysis of Study Sites**

Table 5.1 highlights the themes and categories that emerged across the three sites: Mapleville, Collaborative, and PLC Middle Schools. Twelve total themes emerged based on participants’ responses. The themes and categories that were revealed answered the research questions and highlighted both the similarities and differences amongst the three study locations.

Staff members at each of the study sites reported that there was a strong culture of teacher collaboration and shared practice. Participants reported that data-driven instruction was regularly utilized as a means of identifying areas of student weakness. The majority of participants indicated that there was an orderly learning environment and a strong commitment and focus on student learning. Most participants reported that the school leader was supportive and implemented strategies that enabled the staff and the community to run effectively. Participants across school sites reported that insufficient time was a hindrance to completing tasks that were related to the learning community. Overall, the staff members indicated that the culture of Mapleville Middle School, Collaborative Middle School, and PLC Middle School featured collective responsibility for learning.
### Table 5.1

**Emerging Themes and Categories - Mapleville, Collaborative, and PLC Middle Schools**

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<thead>
<tr>
<th>Research Question 1</th>
<th>Research Question 2</th>
<th>Research Question 3</th>
<th>Research Question 4</th>
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<td><strong>Collaborative Middle School</strong></td>
<td><strong>PLC</strong></td>
<td><strong>Collaborative Culture</strong></td>
</tr>
<tr>
<td><strong>Theme: Collegial Relationships</strong></td>
<td><strong>Theme: Results Orientation</strong></td>
<td><strong>Theme: Barriers and benefits of PLC Implementation</strong></td>
<td><strong>Theme: Collaborative Culture</strong></td>
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<td><strong>Categories:</strong></td>
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<tr>
<td>1.Teacher Support</td>
<td>1.Focus on Student Learning</td>
<td>1.Time and Structure</td>
<td>1.Structures</td>
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<tr>
<td>4.Administrator Support</td>
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| **Collaborative Middle School** | **Theme: Collective Responsibility for Learning** | **Theme: Strengths and Weaknesses of the PLC** | **Theme: Mindset of Continuous Improvement** |
| **Categories:** | **Categories:** | **Categories:** | **Categories:** |
| 4.Intervisitation | | 4. Reflective Conversations | |

| **PLC** | **Theme: Results Orientation** | **Theme: Barriers and Facilitators for PLC Implementation** | **Theme: Culture of Collective Responsibility** |
| **Categories:** | **Categories:** | **Categories:** | **Categories:** |
| 2.Culture | 2.Focus on Student Learning | 2.Use of Data | 2. Willingness to Try New Ideas |
| 4.Teacher Empowerment | | | |
Supportive relationships. In all three study sites, participants commented on the collaborative environment that is in existence at each of the respective schools. Participants reported that the relationships that are forged are ones that positively impact their ability to provide quality instruction and learning settings that are conducive to academic growth and student success. At Mapleville Middle School, teachers repeatedly mentioned the significance of working together to create change. For instance, P5 mentioned:

The teaching staff collaborates often. This is necessary so that we can get and provide support for one another. Sometimes, one person does not have all of the answers. When we as teachers are able to look to one another, relationships of trust and respect are formed. We are then able to better support our students.

Likewise, P3 noted that at Mapleville, there is a culture of support and collegiality: “Teachers regularly receive support to carry out the important work that must be done. We share resources, solve problems together, and regularly communicate about teaching practices.” At Collaborative Middle School, P1 affirmed how supportive relationships have benefitted the staff:

Our collaborative culture allows us to be supportive. We partner to ensure that everyone is able to bring their talents and skills together to create better lessons, improve instructional strategies, and impact student achievement for all of the students in our classes.

Similarly, P6 contended that collaboration and support enable teachers to experience growth to further develop their teaching ability and repertoire. P6 explained the positive impacts that collaboration had on the staff at CMS:
Collaboration is a great form of support to teachers regardless of the amount of years that they have been in the classroom. Every teacher has a strength and something beneficial to offer. So, when we collaborate, we become better at what we do. We can support one another by exchanging ideas or by modeling a lesson or by sharing the resources that we use in our own classrooms. This allows us to become better at what we do and to grow professionally.

At PLC Middle School, P2 explained that intervisitations strengthen teacher practice and improve student outcomes. P2 explained that this practice positively impacted school staff. P2 stated:

We visit the classrooms of other teachers and provide feedback. This practice allows an honest dialogue and provides teachers with an assessment of their lessons. It gives an understanding of what went well and areas that can be strengthened. This type of collaboration also allows good practices to be observed and duplicated.

It was evident from participants’ responses that the staff at Mapleville Middle School, Collaborative Middle School, and PLC Middle School believes that there are strong supportive relationships in existence at these study locations. Participants proclaim the benefits of this supportive environment including: greater student achievement, increased communication, and stronger instructional practices.

**Results orientation.** The themes that emerged at each of the respective sites revealed very similar behaviors and practices at MMS, CMS, and PLCMS. Participants’ responses revealed that each of these middle schools were staffed by individuals who are focused on transforming instruction and sustaining results to produce far-reaching
improvement. At Mapleville, for instance, P5, referring to the leadership, noted that “the school leader looks at the data and uses it to get a better sense of what is going on. He makes changes that are based on the existing data.” Similarly, P2 mentioned:

Data analysis is one of the most important practices that we use. It helps to constantly keep a focus on what is important. This is why there are inquiry cycles. Once there is improvement in one area, we keep assessing the students’ performance to find other areas of weakness. Then, we create additional action plans to meet those needs as well.

At Collaborative Middle School, teacher comments about a focus on results were similar to the responses of those at Mapleville. Their responses also indicated that PLCs that are results-focused improve student achievement. P4 remarked:

Professional development is helpful to the teachers here. The trainings that are held help to improve some aspects of a teacher’s instruction or practice. The teacher takes what he or she learns and applies it to their classroom procedures, lessons, and instruction. The result is usually that teachers reflect more on the things that they do and are more aware of the need to improve for their own benefit and for that of the student.

P2 noted that teachers examine work products to get a good sense of the students’ levels of functioning and areas that may be challenging. P2 posited, “the student work is necessary to understand where students are. When we analyze it, we find ways to help students to succeed.” P3 from PLC Middle School indicated that the PLC that is currently in operation leads to changes and behaviors that promote favorable outcomes
for students. “We are constantly trying to do whatever it takes to help students to learn through different strategies” (P3).

**Barriers and benefits of PLC implementation.** The implementation of professional learning communities in schools has traditionally been marked by both positive and negative outcomes. The participants at all three of the study sites highlighted a number of practices that have led to advances in the PLC as well as several factors that have resulted in unfavorable outcomes.

At both Collaborative Middle School and PLC Middle School, the use of data drives the decisions that are made in regard to curriculum, instruction, and assessment. Participants at CMS reported that the data analysis process aids them in enhancing teaching strategies and advancing educators’ skills. P4 expressed:

Being able to look back at the assessments that are given and then looking at the data that comes out of this, we as a team, are able to figure out what the students need assistance in. This leads to coming up with solutions that will help them to perform better in the future.

P6 also discussed the benefits of data-driven instruction. P6 remarked, “When educators here use data to drive instruction, we are able to address student challenges more effectively.” On the other hand, participants at all three locations identified insufficient time and improper use of time as a hindrance to the completion of necessary learning community tasks. P4 from Mapleville noted:

There is often not enough time to complete everything that must be done. There are many things that need to be completed and sometimes it is hard to finish them all at the same time. As a result, the professional learning community is not as
effective as it can be. There are times when other activities are scheduled during this time. This makes it hard for the staff to keep up with the responsibilities of the professional learning community.

P5 from Collaborative Middle School also discussed inadequate time as an impediment to the learning community process. P5, however, pointed out that the major issue with regard to the time is that the inquiry cycle sometimes stretches on and sometimes all steps of the process are not completed. P5 noted:

There are several steps to the inquiry cycle. Sometimes there is no balance. We spend too much time on some steps and then not enough time on others. It is important to go through each step carefully, but also to ensure that enough time is being spent on items such as locating materials for lessons and the actual analysis of the data.

Similar to the MMS and CMS, P1 from PLCMS indicated that, “Time is one of the biggest issues that we face. To be successful, there is a lot to be done, but there never seems to be adequate time to do it.”

P3 from PLCMS discussed the lack of common planning time for teachers. This participant noted the importance of teachers collaborating to improve instructional quality, lesson planning, and curriculum development. P3 stated:

Collaboration is important to the success of this professional learning community. It is an opportunity for staff to reflect on practice, share ideas and resources, and personalize instruction for individual students. When the common planning time is limited, we don’t have a chance to talk or to partner to pool our ideas. Teachers sometimes feel frustrated.
While there were a number of similarities across Mapleville, Collaborative, and PLC Middle School, there were also some differences that surfaced. Based on research question 1, which examined participants’ beliefs about the aspects of each school’s culture that was impacted by the learning community, none of the themes that emerged were the same. At Mapleville, the theme related to this question revealed the presence of collegial relationships. Participants’ responses indicated that as a result of teachers collaborating on a regular basis, the relationships that were formed were strengthened and the trust and respect that resulted allowed for the exchange of ideas and the sharing of best practices.

The resulting theme for research question 1 at Collaborative Middle School was teacher support. Pedagogues reported being supported in various ways. This included partnering with colleagues to plan lessons and visiting one another to view lessons to strengthen teacher pedagogy. At PLC Middle School the emerging theme as it related to research question 1 was collaborative culture. The participants at this location noted that the culture was significantly impacted by the ability of staff members to work together to effect change.

The categories for research question 1 were also dissimilar at MMS, CMS, and PLCMS. Administrator support emerged as a unique category at Mapleville. The staff members explained that the supportive environment that was created by the school’s principal established a culture of respect and the freedom and willingness to take risks. Participants at Collaborative Middle School mentioned aspects of communication as a significant component of the learning community that impacted the culture. This was one
of the categories that resulted. The staff members posited that the open dialogue allowed for the transfer of learning and solutions to challenges to be identified.

Based on research question 2, there were additional differences that exist within the three study locations as it relates to the impact of classroom pedagogy on the academic environment. This research question related to the effect of the professional learning community model on the academic climate within each school community. The overarching theme at Mapleville and PLC Middle School was results orientation. On the other hand, the theme that emerged at Collaborative Middle School was collective responsibility for learning. The participants at MMS and PLCMS asserted that the learning community was extremely impactful in the area of results. Participants noted there was a clear and unwavering focus on student success. Teachers, for example, spent a great deal of time examining student work products to identify the strengths and weaknesses that students exhibited. The theme collective responsibility for learning that was highlighted at CMS demonstrated that staff members, on a whole, were fully invested in devising methods for holding one another accountable for the learning of both the staff and the students.

Based on research question 3, which allowed participants to identify the strengths and weaknesses of the professional learning community, it is evident every learning community often faces a unique set of challenges. While some issues such as adequate time were consistent across the sites, there were some circumstances that were unique to specific schools. For example, one specific challenge that was revealed only at Mapleville related to the types of learning community meetings that were being held. Participants affirmed that the meetings that were most beneficial were those that were
attended by teachers of the same grade level and/or subject area. The participants noted that when there were cross departmental and grade level meetings, these gatherings often resulted in a lack of productivity. The meetings often resulted in disagreements and unresolved conflict. On the contrary, the barrier to successful implementation of this model at PLCMS often was a direct result of scheduling conflicts. Teachers were often not able to meet at designated time periods due to several meetings being scheduled simultaneously.

The category of reflective conversations was a subtheme that resulted at Collaborative Middle School. Participants noted this practice as a beneficial component of a viable and effective learning community. The participant responses also indicated differences in the structures that were most impactful at the three schools. The staff members at Mapleville Middle School indicated that shared and supportive leadership was an area that needs to continuously be strengthened. Participants believed that decision making needs to be a joint effort between the leadership and other key staff. Participants at Collaborative Middle School and PLC Middle School noted that shared and supportive leadership is an area that is a significant aspect of the culture at these locations. Participants indicated that opportunities exist for staff members to initiate change and to make decisions related to teaching and learning.

The fourth and final research question required participants to provide their perceptions on the extent to which collaboration in the PLC impacts student achievement. The resulting theme at Mapleville was collaborative culture. Teachers at Mapleville indicated that common assessments were a major component of the PLC. This practice was utilized to establish commonality across various classrooms. These common
assessments enable Mapleville staff to establish a baseline for student learning and also allows for lesson plans to be devised that enable educators to meet the needs of the student in their respective classrooms. The theme of common assessments were unique to Mapleville as staff members at CMS and PLCMS did not put as much emphasis on the use of these examinations in monitoring student progress.

The theme that emerged at Collaborative Middle School was the mindset of continuous improvement. The staff members suggested that practices including the setting of high expectations for all learners and the constant sharing of the workload allowed for a continuous focus on ensuring that students are successful. At PLC Middle School, one of the unique categories that resulted from the data was the willingness of the participants to try new ideas and methods within their instruction. This, participants, explained impacted student achievement because educators utilized a variety of approaches and methods to strengthen student engagement, and understanding of the content.

While there were a number of similarities and differences amongst the three study sites, this data will allow school leaders to identify the practices that are beneficial and those that serve to hinder PLC implementation. The overall benefit of these findings will serve to enhance and strengthen teacher knowledge, instructional practice, and student success.

**Implications for Practice**

The study’s results are discussed according to the findings that arose from the data. The researcher used the perceptions of school staff members at three urban middle schools to examine the impact that each learning community has had on teacher
instruction, school culture, and student achievement. The findings confirm the assertions of major learning community theorists who posit that collaboration can lead to an improvement in teacher quality, increases in student learning, enhanced teacher job satisfaction, and can aid in the attainment of school improvement goals (Dufour et al., 2006; Darling-Hammond & Richardson, 2009; Fullan, 1991; Hipp & Huffman, 2004; Hord, 1997; Senge, 2000).

The current educational climate throughout the United States is one of increased accountability and a greater focus on teacher preparation and student achievement. As a result, teacher preparation has received intense scrutiny over the last decade. The findings of this study provide opportunities for school improvement in areas including: implementation and sustainability of a collaborative culture, teacher leadership, shared values and vision, and teacher support. A dedicated focus to these aspects of the professional learning community can aid school leadership, districts, and departments of education in developing and providing effective educational resources and professional development training to school staff. It is imperative that educational leaders begin to devise and implement methods that will result in substantive school reform.

Additionally, school leaders could utilize these findings to foster greater teacher empowerment, professional growth, collective responsibility, and a culture of learning for diverse student populations. Policymakers and superintendents could utilize this data to revamp teacher training programs to ensure that educators are equipped with the necessary resources and instructional skills to effect change in student achievement. This is also of great significance because nationwide, teacher evaluation systems are based on teacher effectiveness. The development of a fairer accountability system would provide a
supportive structure for improving the quality of teacher instruction and strengthening educators’ knowledge of their content area.

According to Bolam (2004), the professional learning community model is intended to provide educators with the chance to regularly partner with their colleagues to design and implement strategies and lessons that will positively impact student learning. The results of this study yielded 13 themes across the three study sites that provided data related to supportive and unsupportive conditions that impact learning community implementation. The findings from this study can provide school leaders, pedagogues, and teacher leaders with vital information that can be utilized to design learning communities that are effective in bolstering student achievement and improving teaching practice.

This study’s findings contribute to the field of education by capturing educators’ perceptions regarding the learning community and the ways in which it has positively impacted their instructional capabilities and subsequently their potential to properly educate the students that they serve. Because teachers are such vital components of educational improvement, school leaders must aim to provide high-quality professional development opportunities. The understandings gained from this study contribute valuable insights on ways in which to best implement professional learning communities that fuel teacher collaboration, a collective culture of responsibility, and ultimately yields sustained change.

**Recommendations Based on the Implications**

There are multiple recommendations based the research findings.
**Continual support for staff members.** Continued growth of the professional learning community necessitates that efforts are made to ensure that staff members feel supported. This will ensure that turnover rates do not increase. While staff members report that new teachers receive assistance from their colleagues, a mentorship for new teachers would provide knowledge and solidify understanding of the structures and collaborative practices that are essential for a successful PLC. Mentorships would allow veteran staff members to effect change and assume leadership roles within the school community.

**Allow adequate time for PLC community.** Productivity can be increased by properly allocating time for learning community activities. The scheduling issues that were discussed by several participants could be resolved if school leaders thoroughly analyze the activities that constitute legitimate PLC practices. Additionally, school staff members, including the administration, would benefit from creating and adhering to norms that would hold all learning community members accountable for the proper use of time. Furthermore, these norms would allow for appropriate activities to be implemented during the professional learning community meetings.

**Professional development programs.** The findings from the interviews and the questionnaire suggest that there is a need for a formal professional development program within school sites. The learning community promotes teacher collaboration and improvement, however formalized training would allow for the identification of weaknesses in areas including: teacher instruction, curriculum development. The professional development trainings would then be implemented to address and remedy these deficiencies. Such training would require alignment to school improvement goals.
Limitations

**Sample size.** One of the limitations of the study was the sample size. The selected schools were comprised of teachers who taught grades 6, 7, and 8, however, there were no grade 6 teachers involved in the study. Therefore, this was not a thorough representation of the teaching population.

**Varied experiences of participants.** Study participants had varied experiences. Factors including teaching experience and years that staff members served in their current role were not consistent from school to school. These individual experiences may have had significant bearing on the knowledge and understanding that each staff member had in relation to professional learning communities.

**Bias.** The researcher is a public school teacher with more than 14 years of experience. It is possible that research bias impacted the results of this study. The researcher has experienced positive and negative events within the professional learning community. It is possible that these biases may have involuntarily been inserted into the study and its results. Additionally, the interviews included only the perceptions of participants. Their perceptions of the impact of the professional learning community could potentially have been shaped by their personal experiences and biases.

**Time frame.** The study’s timing did not allow the researcher to conduct observations of the physical learning communities at the various school sites. The study included only interviews and a questionnaire, which only encompassed participants’ perceptions, but not an opportunity to see the practices of team members firsthand.
Recommendations for Future Research

There are numerous recommendations for future research investigating professional learning communities. They are as follows:

1. An additional study should be conducted on a larger scale with a bigger sample size. It should involve other districts that comprise the New York City Department of Education’s public school system.

2. Professional learning community models should employ an evaluative component to better assess the needs of the PLC and its participants. This would enable schools, districts, and departments of education to make critical changes to improve the functioning of the framework. Areas including employee effectiveness, scheduling of PLC tasks, and professional development training would need to be assessed annually to ensure that PLC practices are being properly implemented.

3. The staff members who participated in this study discussed the effect of the professional learning community model. Future research could be conducted to ascertain whether there is a correlation between student achievement and teacher participation in a professional learning community.

4. This study focused on teachers’ perceptions regarding the impact of professional learning communities. Another potential study could explore improved teacher efficacy in relation to PLC implementation. This could potentially yield data that can inform professional development activities as a means for improving teacher practice.

5. A qualitative study could be undertaken over the course of several years to examine teachers as they engage in professional collaboration. Such research could potentially provide data related to how their perceptions related to the impact of the PLC
Conclusion

Schools throughout the United States have implemented professional learning communities in an attempt to bolster student achievement (Hamos et al., 2009). Research documents the challenges that are plaguing the field of education and suggests that this system is one of the most complex in existence today. As the conversation around school reform intensifies, so does the focus on teacher preparation and student success. As a result, several studies have been conducted on the PLC model. Numerous studies have been conducted to assess the effect of professional learning communities on school improvement (Chiou, 2011; Lomos et al., 2011; Vescio et al., 2008). A small number of researchers have described the role of principals in the implementation and sustainability of the professional learning community. However, very few studies have focused on staff perceptions in examining critical components of learning communities that are operating in schools. This researcher sought to fill that gap. The findings of the study reveal that teachers believe that the professional learning community fosters professional growth. Professional learning communities that are sustainable necessitate a collaborative environment in which teachers regularly examine student work and utilize the results to inform their practice.

This study sought to gain insight into school staff members’ perceptions of the impact that the professional learning community has on teacher instructional practice, student achievement, and school culture. The findings allowed the researcher to identify the characteristics that are necessary and those that must be eliminated to create a
successful and sustainable PLC. The researcher also analyzed participants’ views of the impact of the school leader on the policies, structure, direction, and vision of the PLC.

A majority of the professional development opportunities that are provided to school staff focus on developing and sustaining high-quality learning communities. The literature surrounding learning communities indicates that utilizing PLCs can result in effective and solid staff development for educators (DuFour et al., 2006; Hadar & Brody, 2010; Wood, 2007). This study is significant for a number of reasons. First, this study aimed to assist public schools in improving their effectiveness by using participants’ perceptions to identify the attributes that are essential for developing high-quality impactful PLCs. The results of this study will also offer administrators a method for evaluating, improving, and sustaining impactful school-based learning communities. Additionally, the information that was gathered by the researcher will serve as a means for endorsing or disproving the need for continued distribution of monetary resources for improving PLCs throughout New York State.

A purposeful sampling of 21 staff members who are members of professional learning communities in three NYCDOE public school sites was utilized in this study. The process for beginning data collection commenced with a letter of introduction to potential participants. A 52-statement questionnaire was included to garner participants’ perceptions. These statements were directly aligned with the four research questions that anchored this study. Interviews that were conducted with participants were audio recorded and subsequently transcribed by the researcher. This process resulted in the formation of 12 themes and 40 categories.
This author used a multiple case study to explore the perceptions of school staff members about the impact that the professional learning community framework has on teacher instructional practice, school culture, and student achievement. The researcher utilized semi-structured interviews with teachers, assistant principals, and principals at three urban public schools. The study also involved the 52-statement Professional Learning Community-Revised questionnaire that allowed participants to assess the learning communities at their respective schools based on six dimensions. The dimensions of the questionnaire were shared and supportive leadership, shared values and vision, collective learning and application, shared personal practice, supportive conditions-relationships, and supportive conditions-structures. The results of this study aid in the identification of the PLC components that must be strengthened to create a sustainable and effective PLC that benefits all stakeholders.

This research study provided answers to the following research questions:

1. What are the perceptions of school staff regarding the impact of PLCs on their learning and effective teaching practices?
2. How do PLCs affect classroom pedagogy and the academic environment?
3. What are the strengths and weaknesses of the implementation of a PLC as perceived by the instructional staff?
4. What PLC practices facilitate a change in the culture of the school?

A single research study may not be the blueprint for widespread PLC implementation, however, it can provide supporting implications for positive social change on the individual, organizational, and societal levels. In this section, the findings are discussed in regard to professional practice, policy, and scholarly understanding. The
findings in this research are based on firsthand accounts of policies, principles, and procedures that promote successful professional learning communities in schools. Educational leaders gain valuable insight about the practices that can be instituted to improve teacher instructional practice.

This study adds to the existing body of literature on professional learning communities and their impact on instruction, school culture, and student achievement. The findings serve to increase knowledge about the factors that result in the success and sustainability of PLCs. This data can potentially be utilized by school districts, administrators, policymakers, and superintendents, to employ substantive reforms that will allow for the implementation of ongoing professional development for educators.

The increasingly rigid accountability standards have catapulted teacher performance to the forefront of educational reform. To create change in this area, strategies to improve curriculum, lesson planning, and summative and formative assessments can be identified to improve learning for both students and pedagogues.

Twelve thematic findings are used in a discussion of the results that came forth from the data collection process at each of the three study locations. The findings that arose yielded significant information about Mapleville Middle School, Collaborative Middle School, and PLC Middle School.

**Mapleville Middle School.** The findings that resulted from the data collection process provided valuable information about the learning community at Mapleville. The main theme that developed was collegial relationships.

**Collegial relationships.** The first finding suggests that collegial relationships are vitally important to the success of the learning community at Mapleville Middle School.
The categories that emerged were teacher support, teacher collaboration, culture, and administrator support. These attributes were important in developing relationships amongst learning community to foster an atmosphere of trust, respect, and support to enhance the capabilities of both the educator and the students.

**Results orientation.** The second finding suggests that learning community staff members must be focused on results and continuous improvement as one component of an effective learning community. The categories that emerged were focus on student learning, data driven decision-making, and intervisitations. This characteristic involves a clear commitment to positive outcomes and the continuous development of goals to effect change.

**Barriers and benefits of PLC implementation.** The third finding suggests that there are characteristics of the PLC that are beneficial and drive favorable outcomes as well those that serve as obstacles to favorable results. The categories that emerged were time and structure, type of meeting/group, and shared and supportive leadership.

**Shared personal practice.** The fourth finding suggests that commonalities in teacher practice are beneficial and lead to improved results in instructional practice, school culture, and student achievement. The categories that emerged were structures, common assessments, and continuous revision of units and lessons. This characteristic of high-functioning learning communities necessitates the sharing of ideas and the development of strategies and practices that affect constructive change.

**Collaborative Middle School.** The findings that resulted from the data that was gathered provided insightful information related to the functioning of the learning
community at Collaborative Middle School. The findings also revealed several features of high-quality PLCs.

**Teacher support.** The first finding suggests that supportive conditions significantly benefit the staff at Collaborative Middle School. Teachers become increasingly empowered and feelings of isolation are lessened. The categories that emerged were teacher collaboration, professional development, teacher empowerment, and intervisitation.

**Collective responsibility for learning.** The second finding suggests that accountability is important to the proper functioning of the PLC. Participants in the learning community must be willing to take responsibility for the outcomes that occur. This results in the dedication of members to continuously revamp the structures to improve the final results. The categories that emerged were student growth, mindset of continuous improvement, and shared vision and goals.

**Strengths and weaknesses of the professional learning community.** The third finding suggests there are positive and negative aspects of the PLC that affect their overall functioning. The favorable findings are those that are beneficial to the efficient functioning of the professional learning community. The unfavorable findings are those that hinder the success of the learning community. The findings clearly reveal that participants must continuously seek to assess the needs of the PLC to eliminate the disadvantageous aspects that are present. The categories that emerged were constant communication, collective work on curriculum, instruction and assessment, time, and reflective conversations.
**Mindset of continuous improvement.** The fourth finding suggests that a mindset of continuous improvement is necessary to continuously bolster the learning that occurs within the PLC. The learning that is facilitated impacts pedagogues’ ability to deliver solid instruction as well as students’ achievement levels. The categories that resulted were collective problem-solving, high expectations for all learners, and shared workload/accountability.

**PLC Middle School.** The resulting findings were identified after the data collection process was complete. The findings highlighted the characteristics that produce learning communities that induce growth in teacher skill and knowledge, empowerment, as well as student success.

**Collaborative culture.** The initial finding at Collaborative Middle School suggests that a collaborative culture is one of the most significant features of a successful learning community. The categories that emerged were teacher collaboration, culture, communication, and teacher empowerment. This PLC characteristic involves the formation of strong relationships, a culture of sharing, and the regular exchange of ideas.

**Results-orientation.** The second finding at CMS is the need for the learning community participants to focus on results. This outcome-based approach fosters an atmosphere of improvement and a mindset that improvement is a continuous process. The categories that emerged were continuous improvement, focus on student learning, and shared vision and goals.

**Barriers and facilitators.** The third finding suggests that the success of the learning community is dependent upon the continuous assessment of the framework and its level of functioning. The findings also indicate that there are positive and negative
features associated with the professional learning community model. It is imperative for staff members to constantly refine practices and structures to improve the impact of the PLC. The categories were teacher support, use of data, and time/scheduling.

**Culture of collective responsibility.** The fourth finding indicates that participants must commit to working together to hold one another accountable for the success of the PLC. This is instrumental to hold all members to the highest standards to ensure success. The categories that emerged were shared resources, willingness to try new ideas, and shared workload /accountability.

This study displays staff members’ perceptions of the impact of the professional learning community on teacher instruction, school climate, and student achievement. The study identified the aspects of school culture and the academic environment that are positively affected by PLCs. Additionally, the participants discussed the strengths and weaknesses of learning communities. The researcher also suggested areas in which further research could potentially be conducted. This included carrying out the study on a larger scale within other districts and school types to ascertain if similar patterns emerge. Recommendations for further research were provided as well as the implications of this study for school leaders, pedagogues, and policymakers.
References


623-639.


Appendix A

Letter Requesting Permission

August 21, 2017

Dr. Dianne Olivier and Dr. Kristine Hipp
Department of Educational Foundations and Leadership
P.O. Box 43091
Lafayette, LA 70504-3091

Renee Martin
St. John Fisher College

Dear Drs. Olivier & Hipp,

I am a doctoral student at St. John Fisher College, currently working on my dissertation entitled *An Examination of Staff Perceptions of the Effectiveness of the Professional Learning Community Model: A Multiple Case Study Design*, under the direction of my dissertation committee chaired by Dr. Jeff Wallis, who can be reached by email at: wwallis@sjfc.edu.

I would like your permission to use the Professional Learning Communities questionnaire instrument in my research study. I would like to use and print your survey under the following conditions:

• I will use the surveys only for my research study and will not sell or use it with any compensated or curriculum development activities.

• I will include the copyright statement on all copies of the instrument.

• I will send a copy of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, please indicate so by replying to me through the following e-mail address: rlm09356@sjfc.edu.

Sincerely,

Renee L. Martin
Appendix B

Approval

Department of Educational Foundations and Leadership
P.O. Box 43091
Lafayette, LA 70504-3091

August 22, 2017

Renee Martin

Dear Ms. Martin:

This correspondence is to grant permission for the utilization of the *Professional Learning Community Assessment-Revised* (PLCA-R) for your doctoral dissertation research at St. John Fisher College. I am pleased you are interested in using the PLCA-R measure to examine staff perceptions of the effectiveness of the professional learning community framework in middle schools. This study's findings will contribute to the PLC literature, as well middle school research.

This permission letter allows use of the PLCA-R through paper/pencil administration, as well as permission for online administration.

While this letter provides permission to use the measure in your study, authorship of the measure will remain as Olivier, Hipp, and Huffman (exact citation on the following page). This permission does not allow renaming the measure or claiming authorship.

Thank you for your interest in our research and measure for assessing professional learning community attributes within schools. Should you require any additional information, please feel free to contact me.

Sincerely,

Dianne F. Olivier

Dianne F. Olivier, Ph. D.
Professor and Coordinator of the Doctoral Program  
Joan D. and Alexander S. Haig/BORSF Professor  
Department of Educational Foundations and Leadership  
College of Education  
University of Louisiana at Lafayette  
P.O. Box 43091  
Lafayette, LA 70504-3091  
(337) 482-6408 (Office) dolivier@louisiana.edu
Appendix C

Professional Learning Communities Assessment – Revised

Directions:
This questionnaire assesses your perceptions about your principal, staff, and stakeholders based on the dimensions of a professional learning community (PLC) and related attributes. This questionnaire contains several statements about practices which occur in some schools. Read each statement and then use the scale below to select the scale point that best reflects your personal degree of agreement with the statement. Shade the appropriate oval provided to the right of each statement. Be certain to select only one response for each statement. Comments after each dimension section are optional.

Key Terms:
- Principal = Principal, not Associate or Assistant Principal
- Staff/Staff Members = All adult staff directly associated with curriculum, instruction, and assessment of students
- Stakeholders = Parents and community members

Scale: 1 = Strongly Disagree (SD)  
2 = Disagree (D)  
3 = Agree (A)  
4 = Strongly Agree (SA)

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<tr>
<th>STATEMENTS</th>
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<tr>
<td><strong>Shared and Supportive Leadership</strong></td>
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<tr>
<td>1. Staff members are consistently involved in discussing and making decisions about most school issues.</td>
<td>SD 0</td>
</tr>
<tr>
<td>2. The principal incorporates advice from staff members to make decisions.</td>
<td>SD 0</td>
</tr>
<tr>
<td>3. Staff members have accessibility to key information.</td>
<td>SD 0</td>
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<tr>
<td>4. The principal is proactive and addresses areas where support is needed.</td>
<td>SD 0</td>
</tr>
<tr>
<td>5. Opportunities are provided for staff members to initiate change.</td>
<td>SD 0</td>
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6. The principal shares responsibility and rewards for innovative actions. 0 0 0 0

7. The principal participates democratically with staff sharing power and authority. 0 0 0 0

8. Leadership is promoted and nurtured among staff members. 0 0 0 0

9. Decision-making takes place through committees and communication across grade and subject areas. 0 0 0 0

10. Stakeholders assume shared responsibility and accountability for student learning without evidence of imposed power and authority. 0 0 0 0

11. Staff members use multiple sources of data to make decisions about teaching and learning. 0 0 0 0

COMMENTS:

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<tr>
<th>STATEMENTS</th>
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<td><strong>Shared Values and Vision</strong></td>
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<td>12. A collaborative process exists for developing a shared sense of values among staff.</td>
<td></td>
</tr>
<tr>
<td>13. Shared values support norms of behavior that guide decisions about teaching and learning.</td>
<td></td>
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<tr>
<td>14. Staff members share visions for school improvement that have an undeviating focus on student learning.</td>
<td></td>
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<tr>
<td>15. Decisions are made in alignment with the school’s values and vision.</td>
<td></td>
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<tr>
<td>16. A collaborative process exists for developing a shared vision among staff.</td>
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<tr>
<td>17. School goals focus on student learning beyond test scores and grades.</td>
<td></td>
</tr>
<tr>
<td>18. Policies and programs are aligned to the school’s vision.</td>
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<tr>
<td>19. Stakeholders are actively involved in creating high expectations that serve to increase student achievement.</td>
<td></td>
</tr>
<tr>
<td>20. Data are used to prioritize actions to reach a shared vision.</td>
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COMMENTS:
<table>
<thead>
<tr>
<th>Collective Learning and Application</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
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</thead>
<tbody>
<tr>
<td>21. Staff members work together to seek knowledge, skills and strategies and apply this new learning to their work.</td>
<td>0</td>
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<tr>
<td>22. Collegial relationships exist among staff members that reflect commitment to school improvement efforts.</td>
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<tr>
<td>23. Staff members plan and work together to search for solutions to address diverse student needs.</td>
<td>0</td>
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<td>24. A variety of opportunities and structures exist for collective learning through open dialogue.</td>
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<tr>
<td>25. Staff members engage in dialogue that reflects a respect for diverse ideas that lead to continued inquiry.</td>
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<tr>
<td>26. Professional development focuses on teaching and learning.</td>
<td>0</td>
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<tr>
<td>27. School staff members and stakeholders learn together and apply new knowledge to solve problems.</td>
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<td>28. School staff members are committed to programs that enhance learning.</td>
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<tr>
<td>29. Staff members collaboratively analyze multiple sources of data to assess the effectiveness of instructional practices.</td>
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<tr>
<td>30. Staff members collaboratively analyze student work to improve teaching and learning.</td>
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**COMMENTS:**

**STATEMENTS**

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<thead>
<tr>
<th>Shared Personal Practice</th>
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<tbody>
<tr>
<td>31. Opportunities exist for staff members to observe peers and offer encouragement.</td>
<td>0</td>
<td>0</td>
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<tr>
<td>32. Staff members provide feedback to peers related to instructional practices.</td>
<td>0</td>
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<tr>
<td>33. Staff members informally share ideas and suggestions for improving student learning.</td>
<td>0</td>
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<tr>
<td>34. Staff members collaboratively review student work to share and improve instructional practices.</td>
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<tr>
<td>35.</td>
<td>Opportunities exist for coaching and mentoring.</td>
<td>0</td>
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<tr>
<td>36.</td>
<td>Individuals and teams have the opportunity to apply learning and share the results of their practices.</td>
<td>0</td>
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<tr>
<td>37.</td>
<td>Staff members regularly share student work to guide overall school improvement.</td>
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**COMMENTS:**

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<tr>
<td><strong>Supportive Conditions – Relationships</strong></td>
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<tr>
<td>38.</td>
<td>Caring relationships exist among staff and students that are built on trust and respect.</td>
<td>0</td>
<td>0</td>
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<tr>
<td>39.</td>
<td>A culture of trust and respect exists for taking risks.</td>
<td>0</td>
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<tr>
<td>40.</td>
<td>Outstanding achievement is recognized and celebrated regularly in our school.</td>
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<tr>
<td>41.</td>
<td>School staff and stakeholders exhibit a sustained and unified effort to embed change into the culture of the school.</td>
<td>0</td>
<td>0</td>
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<tr>
<td>42.</td>
<td>Relationships among staff members support honest and respectful examination of data to enhance teaching and learning.</td>
<td>0</td>
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<td><strong>Supportive Conditions – Structures</strong></td>
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<tr>
<td>43.</td>
<td>Time is provided to facilitate collaborative work.</td>
<td>0</td>
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<tr>
<td>44.</td>
<td>The school schedule promotes collective learning and shared practice.</td>
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<tr>
<td>45.</td>
<td>Fiscal resources are available for professional development.</td>
<td>0</td>
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<tr>
<td>46.</td>
<td>Appropriate technology and instructional materials are available to staff.</td>
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**STATEMENTS**

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<td><strong>STATEMENTS</strong></td>
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<tr>
<td>47.</td>
<td>Resource people provide expertise and support for continuous learning.</td>
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<tr>
<td>48.</td>
<td>The school facility is clean, attractive and inviting.</td>
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<td>49.</td>
<td></td>
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<td></td>
<td>The proximity of grade level and department personnel allows for ease in collaborating with colleagues.</td>
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<tr>
<td>50.</td>
<td>Communication systems promote a flow of information among staff members.</td>
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<tr>
<td>51.</td>
<td>Communication systems promote a flow of information across the entire school community including: central office personnel, parents, and community members.</td>
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<tr>
<td>52.</td>
<td>Data are organized and made available to provide easy access to staff members.</td>
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**COMMENTS:**

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Dear Ms. Martin:

This correspondence is to grant permission for the utilization of the Professional Learning Community Assessment-Revised (PLCA-R) for your doctoral dissertation research at St. John Fisher College. I am pleased you are interested in using the PLCA-R measure to examine staff perceptions of the effectiveness of the professional learning community framework in middle schools. This study’s findings will contribute to the PLC literature, as well middle school research.

This permission letter allows use of the PLCA-R through paper/pencil administration, as well as permission for online administration.

While this letter provides permission to use the measure in your study, authorship of the measure will remain as Olivier, Hipp, and Huffman (exact citation on the following page). This permission does not allow renaming the measure or claiming authorship.

Thank you for your interest in our research and measure for assessing professional learning community attributes within schools. Should you require any additional information, please feel free to contact me.

Sincerely,

Dianne F. Olivier

Dianne F. Olivier, Ph. D.
Appendix E

INTERVIEW QUESTIONS

1. Tell me about your experiences with PLCs.

2. How do team members transfer learning into their classrooms and how it be proven?

3. How does the team support new members of the team?

4. Do teachers work together to examine student work? Please explain.

5. Do team members meet with each other independently of the team and is this encouraged?

6. Describe ways in which your school is oriented toward action and experimentation.

7. What are some challenges your team faces during a given school year?

8. Describe ways in which your school is oriented toward results.

9. Tell me about the ways your school strives for continuous improvement.

10. What structures support collective learning? What specific PLC practices have proven to be the most beneficial? The least?
March 28, 2018  
Ms. Renee Martin  
920 Co-op City Blvd. Apt. 10F  
Bronx, NY 10475  
Dear Ms. Martin:

I am happy to inform you that the New York City Department of Education Institutional Review Board (NYCDOE IRB) has approved your research proposal, “An Examination of Staff Perceptions of the Impact of the Professional Learning Community Model: A Multiple Case Study Design.” The NYCDOE IRB has assigned your study the file number of 1921. Please make certain that all correspondence regarding this project references this number. The IRB has determined that the study poses minimal risk to participants. The approval is for a period of one year:

Approval Date: March 28, 2018  
Expiration Date: March 27, 2019

Responsibilities of Principal Investigators: Please find below a list of responsibilities of Principal Investigators who have DOE IRB approval to conduct research in New York City public schools.

Approval by this office does not guarantee access to any particular school, individual or data. You are responsible for making appropriate contacts and getting the required permissions and consents before initiating the study.

When requesting permission to conduct research, submit the informational letter to the school principal summarizing your research design and methodology along with this IRB Approval letter. Each principal agreeing to participate must sign the principal informational letter. A completed and signed letter for every school included in your research must be emailed to IRB@schools.nyc.gov. Principals may also ask you to show them the receipt issued by the NYC Department of Education at the time of your fingerprinting.

You are responsible for ensuring that all researchers on your team conducting research in NYC public schools are fingerprinted by the NYC Department of Education. Please note: This rule applies to all research in schools conducted with students and/or staff. See the attached fingerprinting materials. For additional information click here. Fingerprinting staff will ask you for your identification and
social security number and for your DOE IRB approval letter. Researchers who join the study team after the inception of the research must also be fingerprinted. The cost of fingerprinting is $135.

You are responsible for ensuring that the research is conducted in accordance with your research proposal as approved by the DOE IRB and for the actions of all co-investigators and research staff involved with the research.

You are responsible for informing all participants (e.g., administrators, teachers, parents, and students) that their participation is strictly voluntary and that there are no consequences for non-participation or withdrawal at any time during the study.

Researchers must: use the consent forms approved by the DOE IRB; provide all research subjects with copies of their signed forms; maintain signed forms in a secure place for a period of at least three years after study completion; and destroy the forms in accordance with the data disposal plan approved by the IRB.

**Mandatory Reporting to the IRB:** The principal investigator must report to the Research and Policy Support Group, within five business days, any serious problem, adverse effect, or outcome that occurs with frequency or degree of severity greater than that anticipated. In addition, the principal investigator must report any event or series of events that prompt the temporary or permanent suspension of a research project involving human subjects or any deviations from the approved protocol.

**Amendments/Modifications:** All amendments/modification of protocols involving human subjects must have prior IRB approval, except those involving the prevention of immediate harm to a subject, which must be reported within 24 hours to the NYC Department of Education IRB.

**Continuation of your research:** It is your responsibility to insure that an application for continuing review approval is submitted six weeks before the expiration date noted above. If you do not receive approval before the expiration date, all study activities must stop until you receive a new approval letter.

**Research findings:** We require a copy of the report of findings from the research. Interim reports may also be requested for multi-year studies. Your report should not include identification of the superintendency, district, any school, student, or staff member. Please submit a final report with a closure form through our electronic platform.

If you have any questions, please contact Dr. Mary Mattis at 212.374.3913. Good luck with your research.

Sincerely,

Mary C. Mattis, PhD
Director, Institutional Review Board cc: Barbara Dworkowitz